

BENEDETTO LANZA & ROSSANA BRIZZI

ON TWO NEW CORSICAN MICROINSULAR SUBSPECIES
OF *PODARCIS TILIGUERTA* (GMELIN, 1789)

(*Reptilia Lacertidae*)



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(*Reptilia Lacertidae*) (**)

Summary. — Two new small-island races of *Podarcis tiliguerta* with yellow undersides are described: *Podarcis tiliguerta pardii* from Giraglia Island (Capo Corso) and *P. t. granchii* from Poraggia Grande and Poraggia Piccola islets (southeast Corsican coast). The two subspecies are compared with all the populations of *Podarcis tiliguerta* in which yellow venters occur frequently.

Riassunto. — *Su due nuove sottospecie microinsulari còrse di Podarcis tiliguerta (Gmelin, 1789) (Reptilia Lacertidae).*

Descrizione di due nuove razze microinsulari a ventre giallo della *Podarcis tiliguerta*: *Podarcis tiliguerta pardii* dell' Isola Giraglia (Capo Corso) e *Podarcis tiliguerta granchii* degli isolotti Poraggia Piccola e Poraggia Grande (presso la costa sud-orientale della Corsica). Le due sottospecie sono confrontate con tutte le popolazioni delle specie in cui lo xantismo ventrale è presente con maggiore frequenza.

I. - Introduction.

Two new microinsular races of *Podarcis tiliguerta* were discovered during two trips to Corsica: one on Giraglia Island (off the tip of Capo Corso) and the other on the islets of Poraggia Grande and Poraggia Piccola islets (off the southeast Corsican coast). Though these two subspecies show a strong

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degree of ventral xanthism, they differ markedly from *Podarcis tiliguerta grandisonae* Lanza, 1972 and *Podarcis tiliguerta maresi* Lanza 1972, as well as from other populations or races of the same species that have more or less yellow venters. It was therefore considered right to describe them as two new subspecies.

We were greatly aided in our work by Drs. Maria Luisa Azzaroli Puccetti and Marta Bucciarelli Poggesi (curators of the Museo Zoologico dell'Università di Firenze), by Mr. and Mrs. Lodovico Mares who loaned their boat to our group in 1972 and by our friends Patrizio Blandina, Marcello Grassini, Riccardo Innocenti (technician of the Istituto di Zoologia dell'Università di Firenze), Ettore Granchi (taxidermist in the same Institute), Dr. Rodolfo Simoni, Riccardo Simoni, Fabio Sammicheli, Dr. Andrea Bucciarelli, Giovanni Azzaroli, by Drs. Massimo Almagioni, Riccardo Pirozzi, Paolo Innocenti and Stefano Turillazzi and by Paola, Laura and Marco Lanza. We are also indebted to Prof. R. Nardi (Istituto di Geologia dell'Università di Pisa) for the geological data kindly given us, Dr. E. N. Arnold (British Museum of Natural History, London) for checking the English of the text and to the following specialists for having identified the collected material: Prof. P. Alicata (Istituto di Zoologia dell'Università di Roma: Arachnoidea Araneidae), Mr. P. Ardoine (Arcachon: Coleoptera Tenebrionidae), Prof. B. Baccetti (Istituto di Zoologia dell'Università di Siena: Orthoptera), Dr. C. Baroni Urbani (Naturhistorisches Museum, Basel: Hymenoptera Formicidae), Dr. D. Caruso (Istituto di Biologia Animale dell'Università di Catania: Crustacea Isopoda), Dr. F. Giusti (Istituto di Zoologia dell'Università di Siena: Mollusca Gastropoda), Dr. Z. Matic (Institutul Pedagogie de 3 ani, Cluj: Chilopoda), Prof. S. Pignatti (Istituto Botanico dell'Università di Trieste: plants of the genus *Limonium*), Mr. C. Ricceri (Istituto Botanico dell'Università di Firenze: plants), Professor A. Servadei (Istituto di Entomologia Agraria dell'Università di Padova: Heteroptera), Dr. C. Strasser (Trieste: Myriapoda), Dr. A. Valle (Museo Civico di Scienze Naturali E. Caffi, Bergamo: Scorpiones) and Dr. A. Vigna Taglianti (Istituto di Zoologia dell'Università di Roma: Coleoptera Carabidae), Dr. F. Capra (Ist. Zool. Siena: Orthopteroidea).

II. - Characters studied.

The Giraglia and Poraggia populations were compared with the populations of *Podarcis tiliguerta*, that have most yellow on their venters, i.e. those in which yellow is present (at least beneath the head) in all the females and in more than 70% of the males (Table 1). The following 277 specimens (171 ♂♂, 106 ♀♀) were studied:

Giraglia Island (*Podarcis tiliguerta pardii* subsp. n.) (27 ♂♂; 13 ♀♀): 15 ♂♂ n. 15855-15868 and 15878 M. F. (¹), 11 ♀♀ n. 15869-15877 and 15879-15880 M. F., Rossana Brizzi and Riccardo Pirozzi leg., 1.VI.1972; 12 ♂♂ n. 18691-18701 and 18720 M. F., 2 ♀♀ 18702-18703 M. F., Rossana Brizzi, Paolo Innocenti and Stefano Turillazzi leg., 30.IX.1972.

Poraggia Grande Islet (*Podarcis tiliguerta granchii* subsp. n.) (30 ♂♂; 22 ♀♀): 25 ♂♂ n. 16247-16271 M. F., 19 ♀♀ n. 16272-16290 M. F., Maria Luisa Azzaroli, Marta and Andrea Bucciarelli, Rossana Brizzi leg., 6.VIII.1972; 5 ♂♂ n. 18940-18944 M. F., 3 ♀♀ n. 18945-18947 M. F., Marco Lanza and Riccardo Simoni leg., 28.VII.1973.

Poraggia Piccola Islet (*Podarcis tiliguerta granchii* subsp. n.) (16 ♂♂; 6 ♀♀): 14 ♂♂ n. 16291-16304 M. F., 5 ♀♀ n. 16305-16309 M. F., Benedetto and Marco Lanza, Ettore Granchi and Fabio Sammicheli leg., 6.VIII.1972; 2 ♂♂ n. 18948-18949 M. F., 1 ♀ n. 18950 M. F., Marco Lanza and Rodolfo Simoni leg., 28.VII.1973.

Toro Grande Islet [*Podarcis tiliguerta maresi* (Lanza)] (²) (30 ♂♂; 19 ♀♀); 12 ♂♂ n. 13770-13781 M. F., 6 ♀♀ n. 13782-13787 M. F., Benedetto, Laura and Marco Lanza, Patrizio Blandina and Marcello Grassini leg., 1.VIII.1971; 18 ♂♂ n. 16205-16222 M. F., 13 ♀♀ n. 16223-16235 M. F., Benedetto and Paola Lanza, Ettore Granchi, Maria Luisa and Giovanni Azzaroli, Marta and Andrea Bucciarelli and Fabio Sammicheli leg., 8.VIII.1972.

Toro Piccolo Islet [*Podarcis tiliguerta maresi* (Lanza)] (15 ♂♂; 11 ♀♀): 7 ♂♂ n. 13758-13764 M. F., 5 ♀♀ n. 13765-13769 M. F., Benedetto, Laura and Marco Lanza, Patrizio Blandina and Marcello Grassini leg., 1.VIII.1971; 8 ♂♂ n. 16191-16198 M. F., 6 ♀♀ n. 16199-16204 M. F., Ettore Granchi leg., 8.VIII.1972.

Vacca Islet [*Podarcis tiliguerta grandisonae* (Lanza)] (10 ♂♂; 6 ♀♀): 8 ♂♂ n. 13788-13795 M. F., 4 ♀♀ n. 13796-13799 M. F., Riccardo Innocenti, Benedetto and Marco Lanza leg., 22.VII.1971; 1 ♂ n. 18951 M. F., 2 ♀♀ n. 18953-18954 M. F., Rodolfo Simoni and Marco Lanza leg., 22.VII.1973; 1 ♂ n. 18952 M. F., Massimo Almagioni leg., 5.VIII.1973.

Maestro Maria Island [*Podarcis tiliguerta eiselti* (Lanza)] (13 ♂♂; 12 ♀♀): 11 ♂♂ n. 13855-13864 and n. 13871 M. F., 9 ♀♀ n. 13865-13970 and n. 13872-13874 M. F., Riccardo Innocenti, Benedetto and Marco Lanza leg., 23.VII.1971; 2 ♂♂ n. 18955-18956 M. F., 3 ♀♀ n. 18957-18959 M. F., Massimo Almagioni leg., 5.VIII.1973.

(¹) M. F. = Museo Zoologico « La Specola » dell'Università di Firenze.

(²) The senior author regrets the error (« belly » instead of « breast ») in the diagnosis of *Podarcis tiliguerta grandisonae* and *P. t. maresi* (LANZA, 1972, pgs. 387, 16 th line, and 390, 4 th line).

Piana Island (³) [Podarcis tiliguerta eiselti (Lanza)] (8 ♂♂; 7 ♀♀): 8 ♂♂ n. 13820-13827 M. F., 7 ♀♀ n. 13828-13834 M. F., Marco and Benedetto Lanza leg., 23.VII.1971.

Pietricaggiosa Island [Podarcis tiliguerta eiselti (Lanza)] (12 ♂♂; 8 ♀♀): 12 ♂♂ n. 13800-13811 M. F., 8 ♀♀ n. 13812-13819 M. F., Patrizio Blandina, Marcello Grassini and Marco Lanza leg., 8.VIII.1971.

Cavallo Island (Podarcis tiliguerta subsp. inquirenda) (10 ♂♂; 4 ♀♀): 10 ♂♂ n. 16365-16374 M. F., 4 ♀♀ n. 16375-16378 M. F., Benedetto Lanza, Rossana Brizzi, Ettore Granchi, Marta and Andrea Bucciarelli and Fabio Sammicheli leg., 6.VIII.1972.

The mean, standard deviation, standard error and respective confidence limits $P < .05$ (using Student's t for the standard error) were calculated for the majority of the characters studied, which are listed and discussed below.

A. - Patterns and colours (Table 1, Figs. 5-22).

Patterns and colours were studied in late spring (part of Giraglia material) and summer animals. SEGUY's « Code Universal des Couleurs » (P. Lechevalier, Paris 1936) was occasionally used for defining colour (abbr. S. n. = Seguy's number).

a. - Dorsal pattern (Figs. 5-6).

We have established 7 arbitrary classes, numbered 1 through 7 as follows: 1 - very marked dorsal bands; 2 - dorsal bands intermediate between 1 and 3; 3 - poorly marked dorsal bands, more or less reduced by the spreading of the black or blackish processes extending from the dark occipital and/or parietal stripes; 4 - dorsal bands tending to disappear, with the beginning of a network produced by the fusion of some of the lateral processes of the occipital stripe with those of the parietal stripes; 5 - partial reticulation (the above-mentioned fusions are more frequent); 6 - reticulation intermediate between 5 and 7; 7 - all or most of the lateral processes of the vertebral, parietal, temporal and maxillary stripes are fused with each other, forming a complete network.

(³) One of the Cerbicale Islands. Another Piana Island lies between Corsica and Cavallo Island.

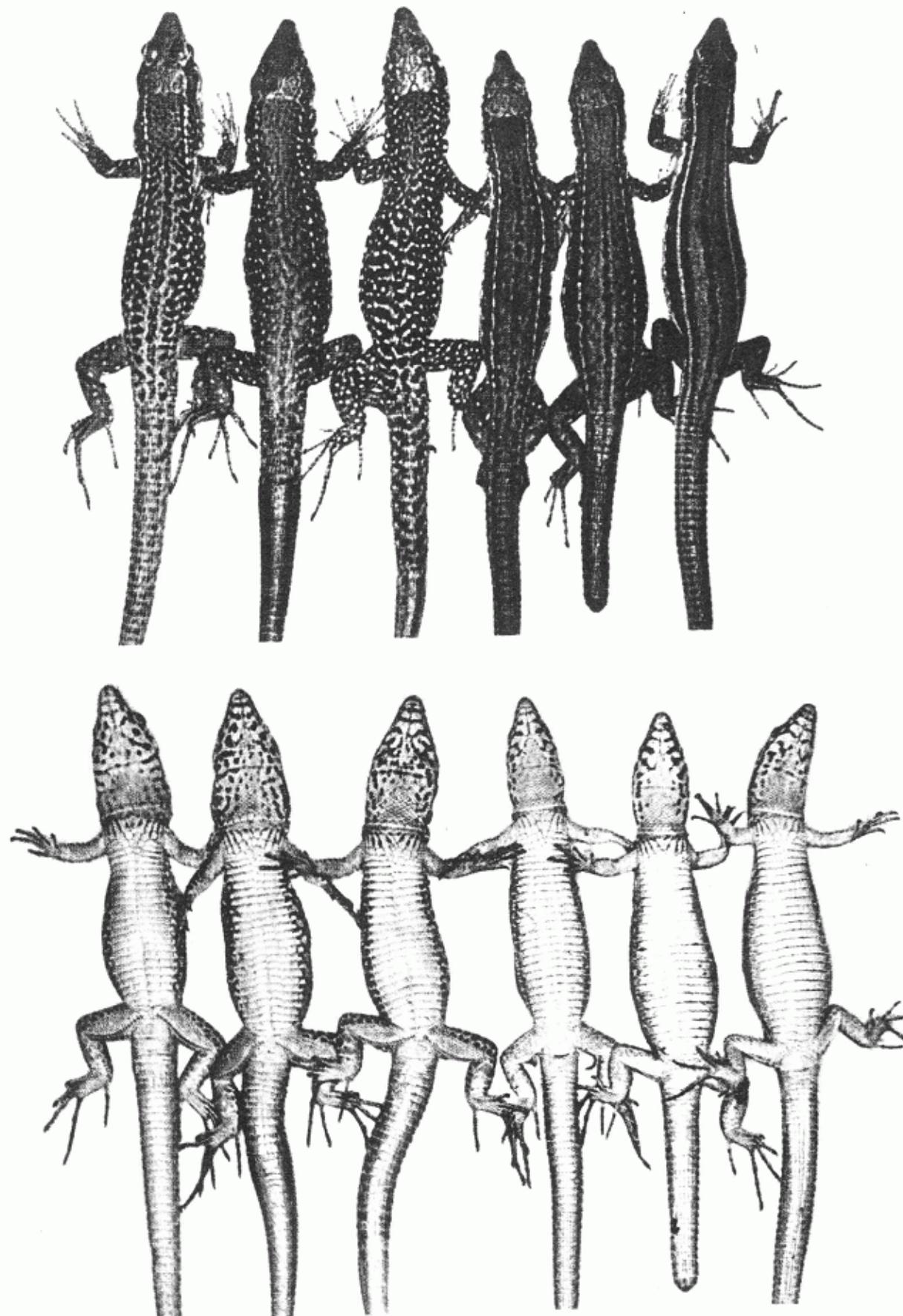
TABLE 1. — Percentage of adults with a more or less intense ventral yellow in the yellowest known populations of *Podarcis tiliguerta*.

Locality, subspecies and number of specimens examined (in brackets)	head	$\delta \delta$ breast	abdomen	head *	$\varphi \varphi$ breast *	abdomen
Giraglia Island <i>P. t. pardii</i> subsp. nova (27 ♂♂, 11 ♀♀)	100	100	100	100	100	100
Poraggia Grande Islet <i>P. t. granchii</i> subsp. nova (30 ♂♂, 22 ♀♀)	100	100	100	100	100	90
Poraggia Piccola Islet <i>P. t. granchii</i> subsp. nova (16 ♂♂, 6 ♀♀)	100	100	100	100	100	83
Toro Grande Islet <i>P. t. maresi</i> (Lanza) (30 ♂♂, 19 ♀♀)	100	100	100	100	100	100
Toro Piccolo Islet <i>P. t. maresi</i> (Lanza) (15 ♂♂, 11 ♀♀)	100	100	100	100	100	100
Vacca Islet <i>P. t. grandisonae</i> (Lanza) (10 ♂♂, 6 ♀♀)	100	100	100	100	100	83
Maestro Maria Island <i>P. t. eiselti</i> (Lanza) (13 ♂♂, 12 ♀♀)	92	92	92	100	100	72
Piana Island <i>P. t. eiselti</i> (Lanza) (8 ♂♂, 7 ♀♀)	87	87	87	100	100	71
Pietricaggiosa Island <i>P. t. eiselti</i> (Lanza) (12 ♀♀, 8 ♂♂)	75	75	66	100	100	37
Cavallo Island <i>P. t.</i> subsp. <i>inquirenda</i> (10 ♂♂, 4 ♀♀)	80	80	90	100	100	50

* No other *Podarcis tiliguerta* population is known to have all the females with a yellow breast and head underparts.

TABLE 2. — Percentage of supraciliary stripe discontinuity.

Locality, subspecies and number of specimens examined (in brackets)	♂ ♂	♀ ♀
Giraglia Island <i>P. t. pardii</i> subsp. nova (27 ♂ ♂, 11 ♀ ♀)	88.00	18.10
Poraggia Grande Islet <i>P. t. granchii</i> subsp. nova (30 ♂ ♂, 22 ♀ ♀)	23.33	0.0
Poraggia Piccola Islet <i>P. t. granchii</i> subsp. nova (16 ♂ ♂, 6 ♀ ♀)	37.05	0.0
Toro Grande Islet <i>P. t. maresi</i> (Lanza) (30 ♂ ♂, 19 ♀ ♀)	100.00	73.06
Toro Piccolo Islet <i>P. t. maresi</i> (Lanza) (15 ♂ ♂, 11 ♀ ♀)	100.00	63.60
Vacca Islet <i>P. t. grandisonae</i> (Lanza) (10 ♂ ♂, 6 ♀ ♀)	50.00	0.0
Maestro Maria Island <i>P. t. eiselti</i> (Lanza) (13 ♂ ♂, 12 ♀ ♀)	23.07	0.0
Piana Island <i>P. t. eiselti</i> (Lanza) (8 ♂ ♂, 7 ♀ ♀)	25.00	0.0
Pietricaggiosa Island <i>P. t. eiselti</i> (Lanza) (12 ♂ ♂, 8 ♀ ♀)	25.00	0.0
Cavallo Island <i>P. t. subsp. inquirenda</i> (10 ♂ ♂, 4 ♀ ♀)	40.00	0.0



Figs. 1-2. — *Podarcis tiliguerta pardii* subsp. nova from Giraglia Island.
From left to right ♂ 15859, 15858, 15861 (holotype), ♀ 15872, 15869,
15870 (Photo R. Innocenti).

The lizards classified as 1 to 3, 5 to 7 and 4 may be respectively defined as « striated », « reticulated » and « intermediate ».

In *Podarcis tiliguerta maresi* the males are always, the females nearly always, reticulated; the male reticulation is usually very strong. We found the intermediate type in 5.2% of the Toro Grande and 18.1% of the Toro Piccolo females and the striated type in only 15.7% of the Toro Grande females.

In the other populations the females are always striated (with a few exceptions on Poraggia Grande) and the males usually so except for those from Poraggia Grande and Poraggia Piccola (usually of the intermediate type with a tendency towards reticulation) and those from Cavallo (usually of the intermediate type).

b. - Supraciliary stripe (Table 2).

We have distinguished 2 types of supraciliary stripes: 1 - *continuous* or *subcontinuous*, i.e., with very few interruptions due to the exceptional fusion at some levels of the lateral processes arising from the parietal and temporal stripes; 2 - *discontinuous*, i.e., broken into little light spots as the above-mentioned fusions take place along the entire back.

The lizards studied may be divided in 3 groups:

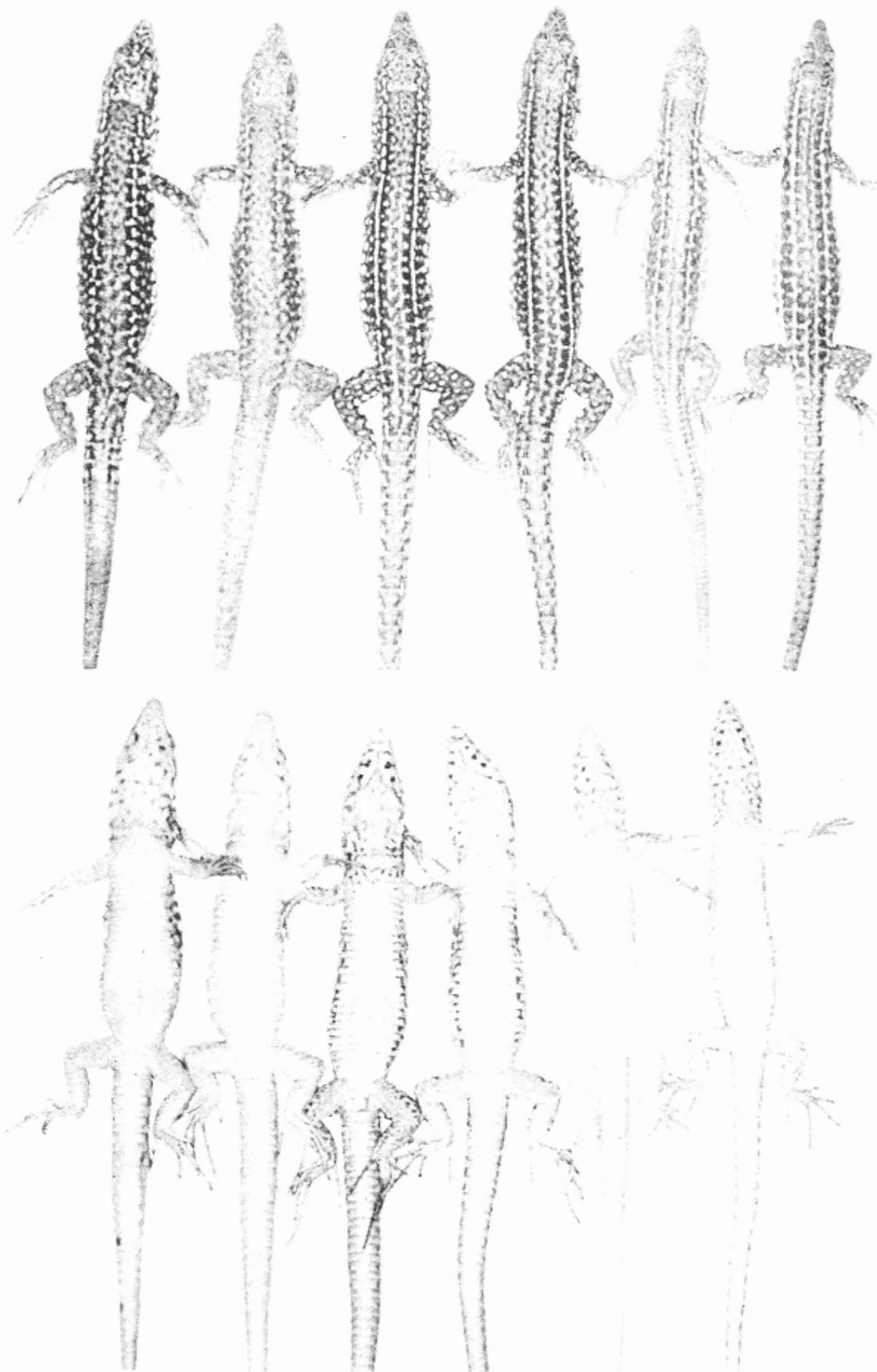
1) the Toro Grande and Toro Piccolo populations where less than 40% of the females have a continuous stripe and 100% of the males have a discontinuous one;

2) the Giraglia population where 88% of the males and 18.10% of the females have a discontinuous stripe;

3) the other populations where the females always have a continuous stripe and 23.07-50% of the males have a discontinuous one.

c. - Degree of development of the dark (generally black or blackish, sometimes brown or grey) marking on the throat (Figs. 7-8).

Considering the absence of dark spots and/or vermiculations as 0 and the closest, darkest marking observed as 6, we have established 5 arbitrary intermediate classes, numbered 1 through 5.



Figs. 3-4. — *Podarcis tiliguerta granchii* subsp. nova from Poraggia Piccola (P. P.) and Poraggia Grande (P. G.) islets. From left to right ♂♂ 16291 (holotype P. P.), 16298 (P. P.), 16253 (P. G.), 16256 (P. G.), ♀♀ 16305 (P. P.), 16274 (P. G.) (from a colour slide by R. Innocenti).

The lizards studied may be divided in 2 groups:

1) the Vacca, Toro Grande and Toro Piccolo populations with an average value greater than 4;

2) the other populations with average values from 1.70 to 3 in the males and from 1.44 to 2.81 in the females.

d. - Degree of development of the dark (black, blackish, dark grey or brown) markings on the ventral plates (Figs. 11-16).

Scoring the absence of dark spots as 0 and the most developed marking (i.e., nearly all the ventrals spotted) as 3, we have established 2 arbitrary intermediate classes, numbered 1 and 2.

The innermost longitudinal rows of ventral plates are usually devoid of any marking except in *Podarcis tiliguerta maresi* which shows average values from 1.66 (Toro Piccolo) to 2.30 (Toro Grande) in the males and from 2.18 (Toro Piccolo) to 2.42 (Toro Grande) in the females. Also the intermediate and outer longitudinal rows of ventral plates of the Toro Grande and Toro Piccolo populations are more spotted but in comparison to the other populations the differences are less evident.

e. - Total number of lateral blue spots (Figs. 9-10).

These were counted, even if occupying one scale only, between axilla and groin. This trait is highly variable among the Corsican populations.

The Giraglia, Toro Grande and Toro Piccolo males usually have more lateral blue spots than the other males, a tendency which is much less evident in the females.

f. - Ground colour of the dorsal band.

This character is highly variable in *Podarcis tiliguerta*. Like most Corsican lizards, those from Giraglia, Poraggia Grande, Poraggia Piccola, Maestro Maria, Piana, Pietricaggiosa, Cavallo and Vacca islands always, or almost always, have a brown dorsal band (completely green in only the Vacca male n. 13789 M. F., posteriorly green in only the Piana male n. 13821 M. F.). The Vacca population usually has a rather dark brown dorsal band but melanistic specimens also occur in the nominate race. The Toro Grande and Toro Piccolo lizards have a green, yellow or

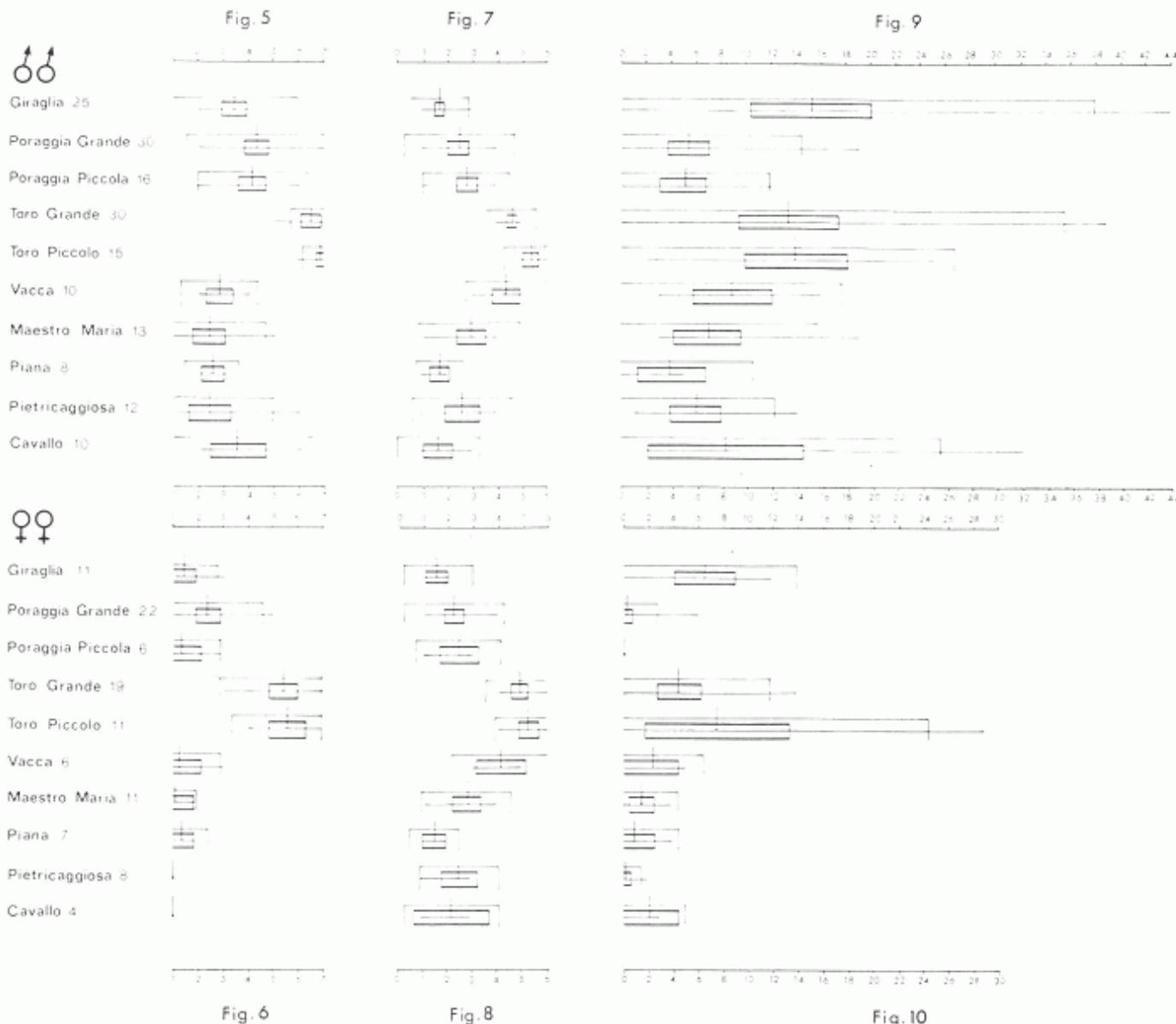


Fig. 5. — Variation of the male dorsal pattern. The following explanation refers to Figs. 5-52. Vertical bar represents the mean, bottom horizontal line the variability range, open and closed rectangles the confidence limits $P < .05$ of the standard deviation (twice the σ) and standard error (calculated by Student's t), respectively. The name of each island is followed by the number of specimens examined.

Fig. 6. — Variation of the female dorsal pattern (see Fig. 5).

Fig. 7. — Variation of the dark marking on the male throat (see Fig. 5).

Fig. 8. — Variation of the dark marking on the female throat (see Fig. 5).

Fig. 9. — Variation in the total (left and right) number of male lateral blue spots (see Fig. 5).

Fig. 10. — Variation in the total number of female lateral blue spots (see Fig. 5).

brown residual ground colour, more often brown than green in the females and more often green or yellow in the males.

g. - Intensity of the yellow on the throat (Figs. 17-18), breast (Figs. 19-20) and abdomen (Figs. 21-22).

Considering the absence of yellow as 0 and the deepest yellow observed (similar to S. n. 256 = jaune soleil) as 6, we have established 5 intermediate arbitrary classes, numbered 1 through 5 as follows: 1 - only a slight trace of yellow; 2 - very light yellow; 3 - similar to S. n. 244; 4 - similar to S. n. 288; 5 - similar to S. n. 226 = jaune de cadmium or n. 271 = jaune d'or.

The average values of the Giraglia, Poraggia Grande, Poraggia Piccola, Toro Grande, Toro Piccolo and Vacca lizards are clearly higher than those of the other animals.

h. - Ventral reddish colour.

In some *Podarcis tiliguerta* from Corsica and certain satellite islands the ventral ground colour is reddish (Naples yellow, apricot, salmon, etc.). Only a few males from our present material have reddish underparts: 1 out of 8 from Piana, 1 out of 13 from Maestro Maria, 2 out of 12 from Pietracaggiosa and 2 out of 10 from Cavallo. In the Vacca male n. 18952 M. F. the breast and edge of the black gular spots are reddish brown (S. n. = jaune indien).

Fig. 11. — Variation of the dark marking on the male outer ventral plates (see Fig. 5).

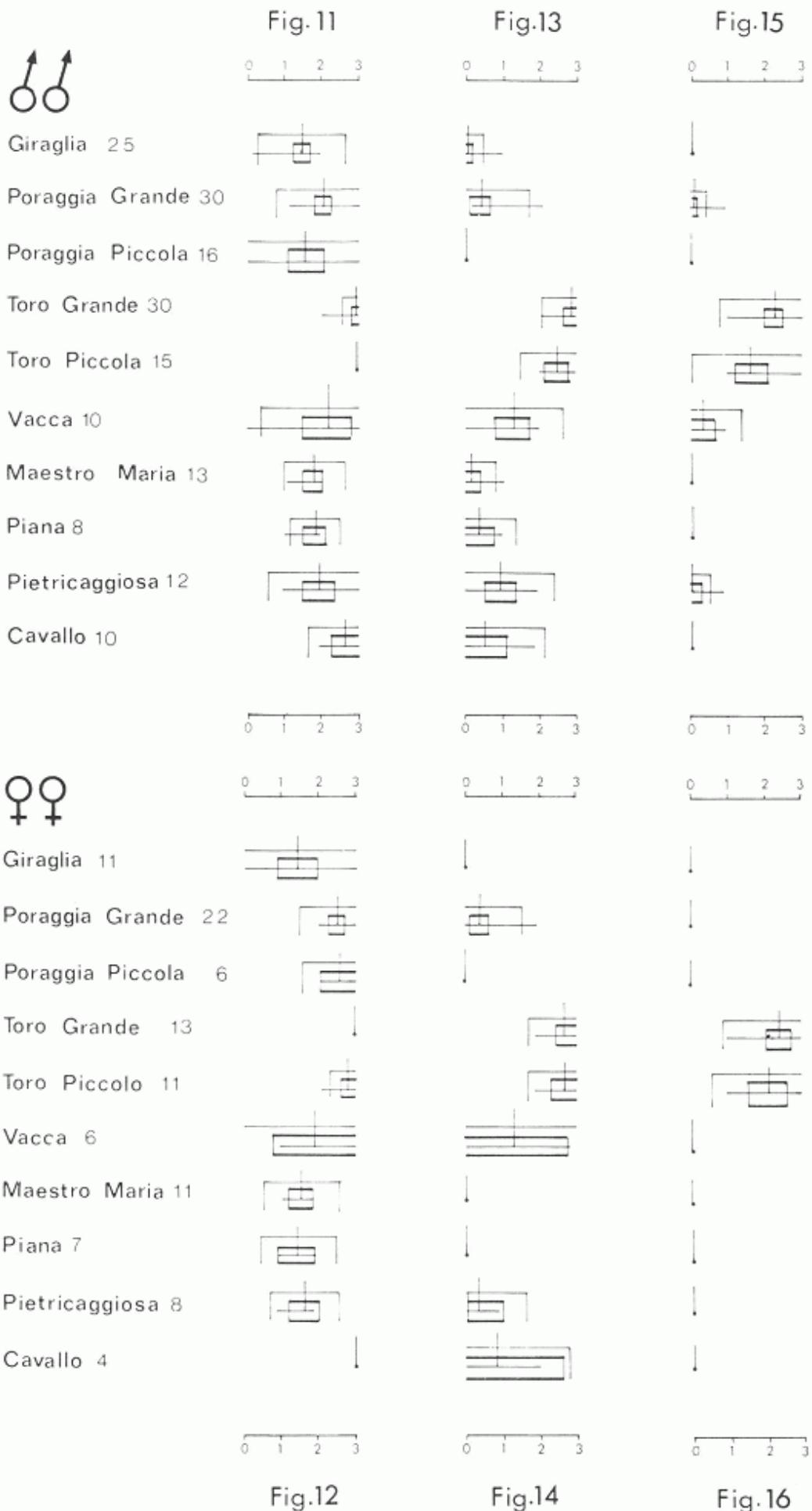
Fig. 12. — Variation of the dark marking on the female outer ventral plates (see Fig. 5).

Fig. 13. — Variation of the dark marking on the male intermediate ventral plates (see Fig. 5).

Fig. 14. — Variation of the dark marking on the female intermediate ventral plates (see Fig. 5).

Fig. 15. — Variation of the dark marking on the male inner ventral plates (see Fig. 5).

Fig. 16. — Variation of the dark marking on the female inner ventral plates (see Fig. 5).



B. - *Morphological characters* (Figs. 23-52).

a. - Size (Figs. 23-24).

The Toro Grande and Toro Piccolo lizards (*P. t. maresi*) are significantly larger than the other populations considered; in fact they are the largest known representatives of the species (maximum head + body length: Toro Grande ♂♂ 69 mm, Toro Piccolo ♂♂ 73 mm; ♀♀ 64 mm). The size of the other lizards usually falls within the size range of the Corsican nominate race (♂♂ 65 mm; ♀♀ 59 mm). The males of Poraggia Grande and Poraggia Piccola islands (maximum head + body length 63 mm) are significantly larger than those of Giraglia (57 mm).

b. - Head proportions.

All our lizards are rather platycephalous, i.e., with the head depth equal to or less than half the pileus length.

c. - Tail length.

Data on the Pietricaggiosa lizard are lacking. The lizards of the other islands, as well as of Corsica, are almost always long-tailed, i.e. with the tail twice or more than twice the head and body length, when definitely not regenerated. The few exceptions are indicated by an asterisk in the table on page 170.

d. - Lepidosis (Figs. 25-51).

In addition to the head scutellation anomalies, the following characters were considered. Number of:

- 1) dorsal scales at mid-body, i.e., in a transverse series halfway between axilla and groin (Figs. 25-26);

- Fig. 17. — Variation of the yellow on the male throat (see Fig. 5).
 Fig. 18. — Variation of the yellow on the female throat (see Fig. 5).
 Fig. 19. — Variation of the yellow on the male breast (see Fig. 5).
 Fig. 20. — Variation of the yellow on the female breast (see Fig. 5).
 Fig. 21. — Variation of the yellow on the male abdomen (see Fig. 5).
 Fig. 22. — Variation of the yellow on the female abdomen (see Fig. 5).

Fig. 17

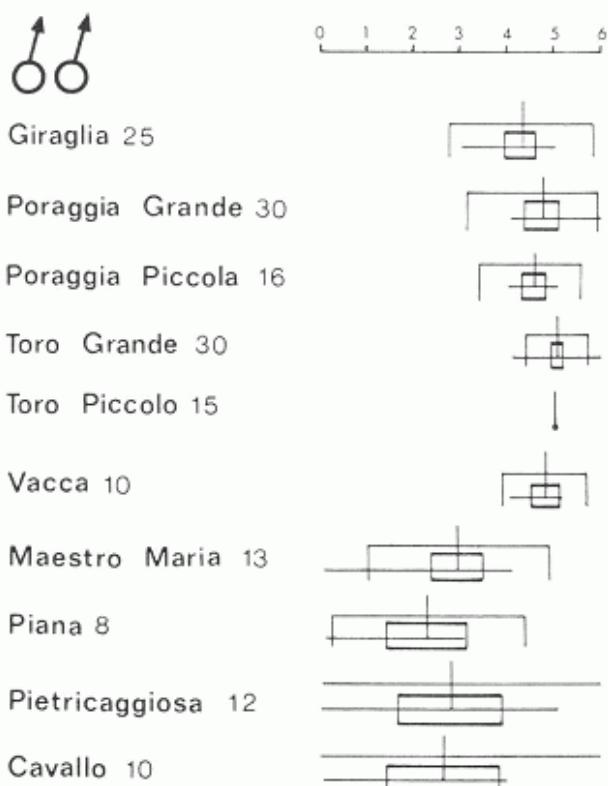


Fig. 19

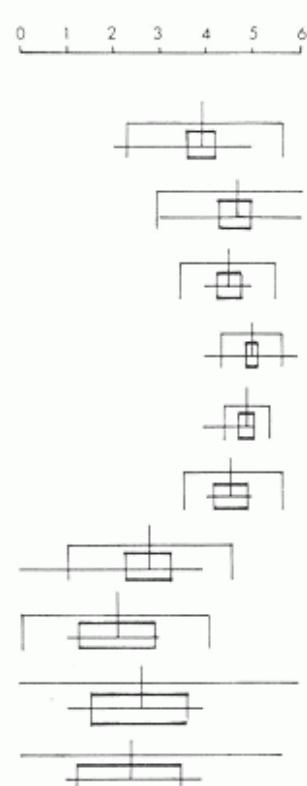


Fig. 21

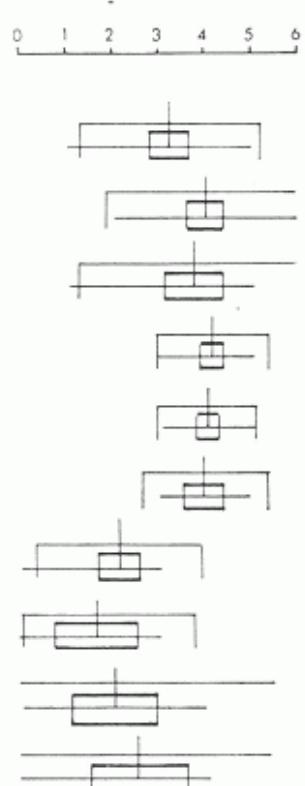


Fig. 18

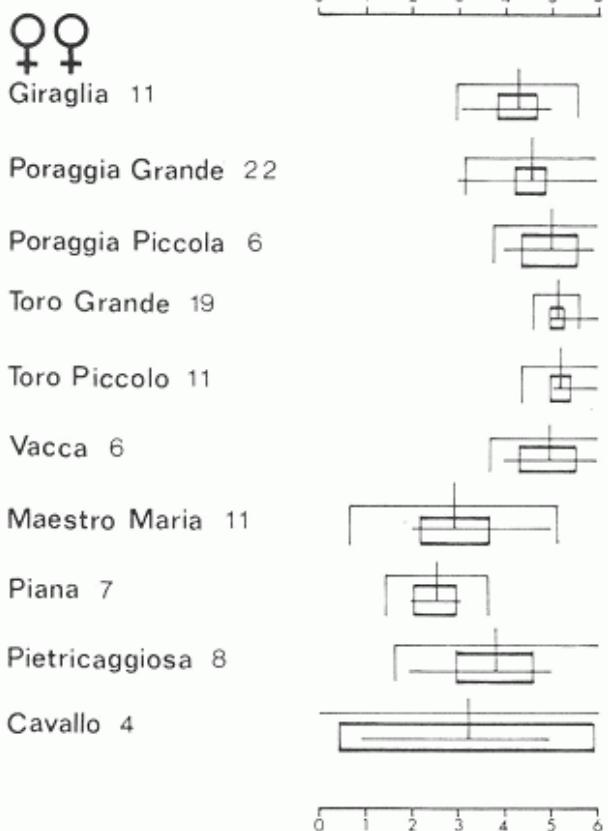


Fig. 20

0 1 2 3 4 5 6

0 1 2 3 4 5 6

Fig. 22

Island	Sex and M. F. collection number	Head + body length (mm)	Tail length (mm)
Giraglia	♂ 15859	51	113
	♂ 15865	50	105
	♂ 15867	46	96
	♂ 15868	48	100
	♂ 15878	44	98
	♂ 18695	57	117
	♂ 18699	53	117
	♀ 15873	46	94
	♀ 15875	48	100
Poraggia Grande	♂ 16261	56	113
	♂ 16265*	56	109
	♂ 16269*	56	110
Poraggia Piccola	♂ 16298*	58	112
	♂ 18948	54	108
Toro Grande	♂ 16219*	61	120
Vacca	♂ 13789	60	123
	♂ 13790	61	127
	♀ 13797*	55	101
	♀ 18953	43	97
	♀ 18954*	56	106
Maestro Maria	♂ 13855	53	113
	♂ 18956	50	103
	♀ 13866	49	100
Piana	♂ 13824	55	127
	♂ 13825	53	126
	♂ 13826	50	102
	♀ 13828	53	106
	♀ 13832	49	107
	♀ 13834	49	100
Cavallo	♂ 16365	62	133
	♂ 16370	54	125
	♀ 16375	50	100
	♀ 16376	52	110
	♀ 16377	54	109

Fig. 23

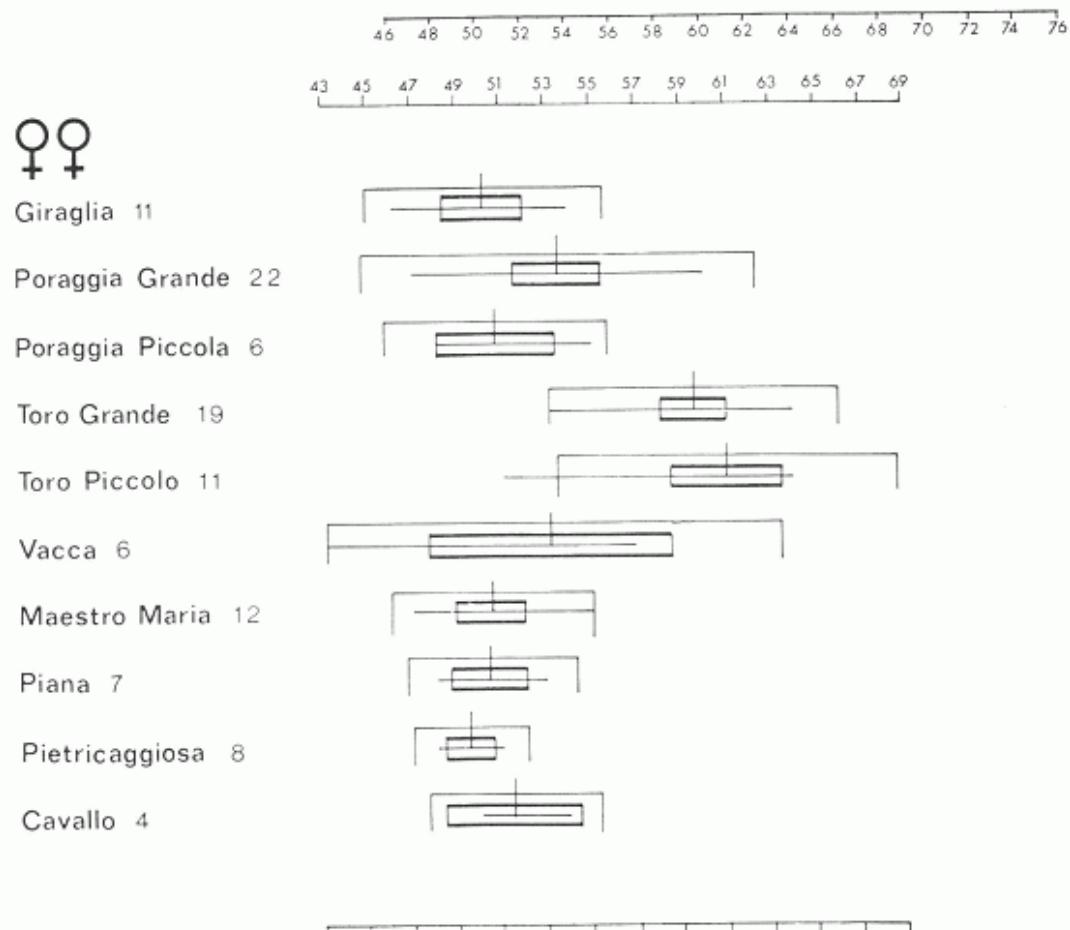
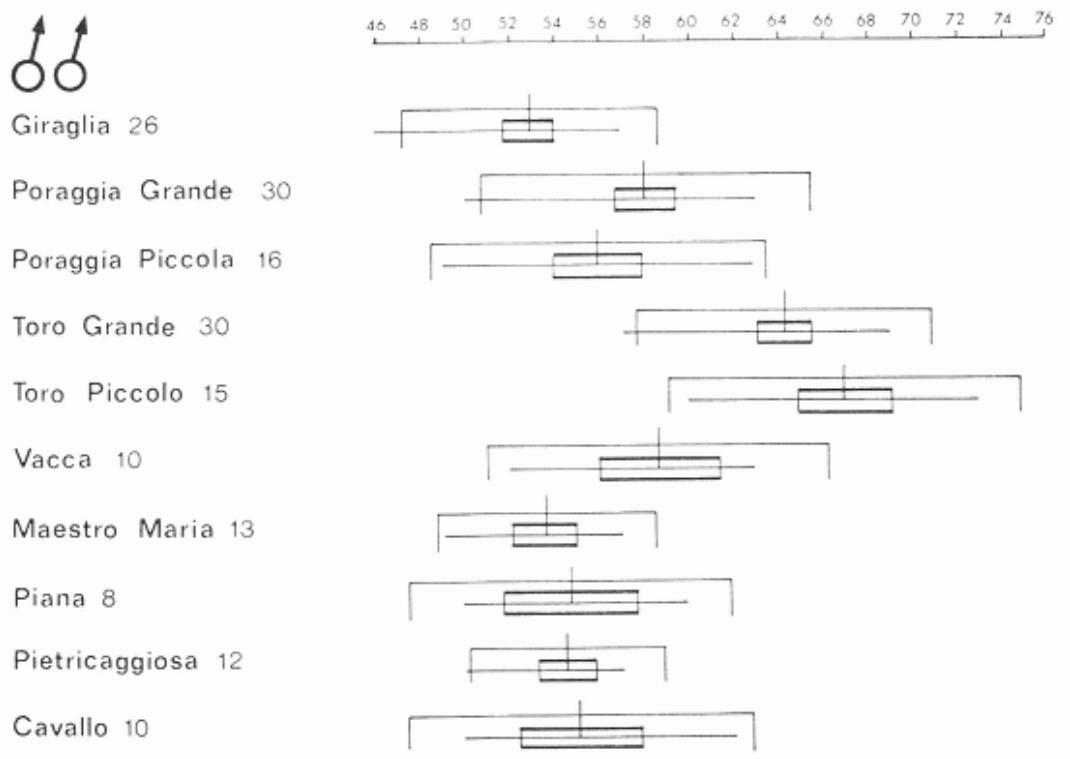


Fig. 24

Fig. 23. — Variation in the size of adult males (see Fig. 5).
 Fig. 24. — Variation in the size of adult females (see Fig. 5).

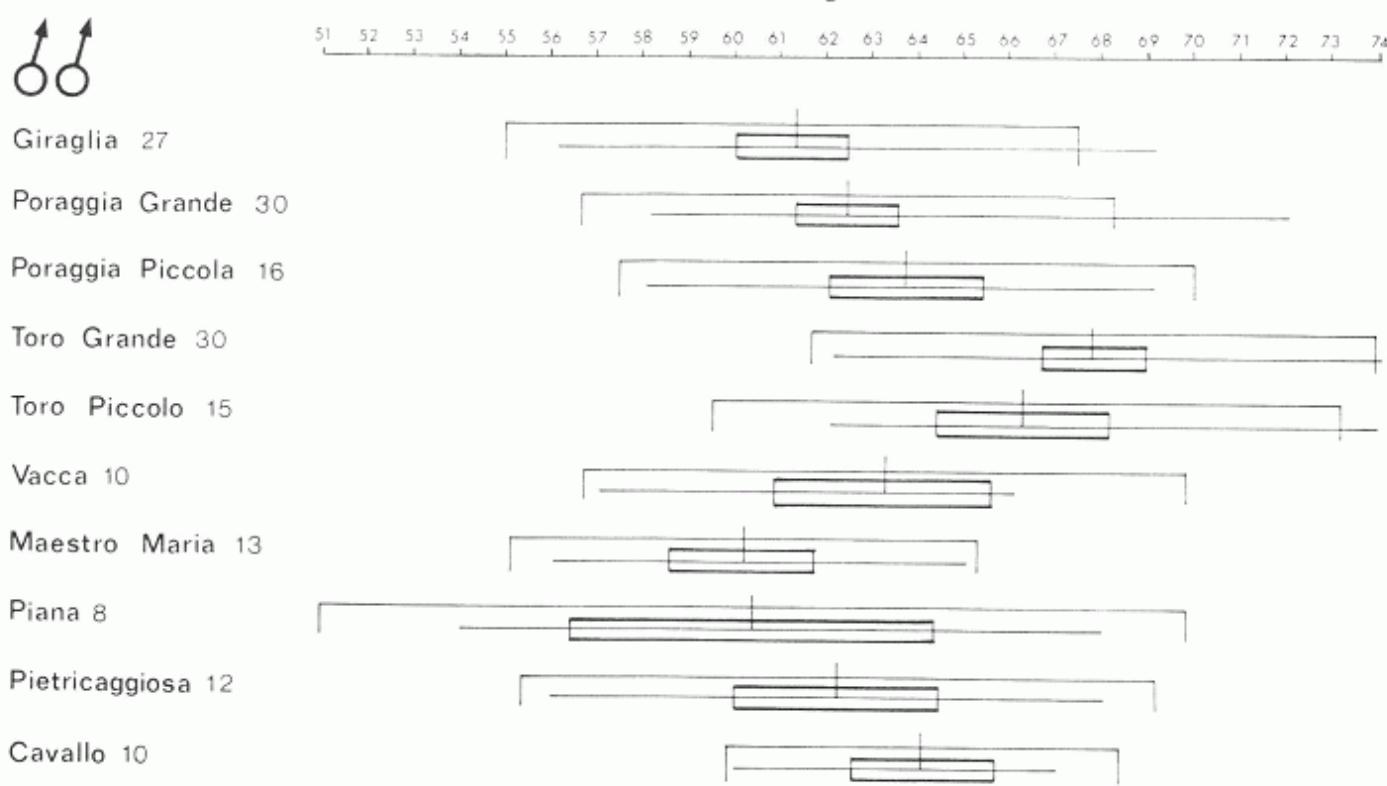
- 2) ventrals in a longitudinal series, not including the last row of scales which are clearly larger than the preanal ones but irregularly placed (Figs. 27-28);
- 3) collar scales (Figs. 29-30);
- 4) gulars in a longitudinal series (Figs. 31-32);
- 5) femoral pores (left: Figs. 37-38; right: Figs. 39-40);
- 6) subdigital lamellae of the 4th toe (left: Figs. 41-42; right: Figs. 43-44);
- 7) supraciliaries (left: Figs. 33-34; right: Figs. 35-36);
- 8) supraciliary granules (left: Figs. 45-46; right: Figs. 47-48);
- 9) supratemporals (left: Figs. 49-50; right: Figs. 51-52).

All the values found in the populations studied fall within the wide variability range of the Corsican nominate race. *P. t. maresi* tends to have more midbody scales than the other Corsican or microinsular populations. Some of the lepidosis characters may also differ significantly in populations that, because of their geographical location and general characteristics, we consider as pertaining to the same subspecies. For instance, the Poraggia Piccola population has more femoral pores and supraciliary granules and less collar scales than that of Poraggia Grande.

In all the Corsican and microinsular populations considered, the *scutum tympanicum* and *scutum massetericum* are more or less well-developed, except in that of Vacca (*P. t. grandisonae*) where the latter is lacking or extremely small, i.e., not larger than the nostril:

	♂ ♂	♀ ♀
	(10 specimens)	(6 specimens)
<i>scutum massetericum</i>		
lacking on both sides	6	4
s. <i>mass.</i> lacking on one side and extremely small on the other	3	1
s. <i>mass.</i> extremely small on both sides	1	1

Fig. 25



♀♀

Giraglia 13

Poraggia Grande 22

Poraggia Piccola 6

Toro Grande 19

Toro Piccolo 11

Vacca 6

Maestro Maria 12

Piana 7

Pietricaggiosa 8

Cavallo 4

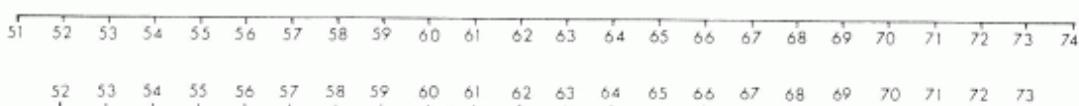


Fig. 26

Fig. 25. — Variation in the number of male midbody scales (see Fig. 5).
 Fig. 26. — Variation in the number of female midbody scales (see Fig. 5).

III. - The Giraglia Island lizard.

Podarcis tiliguerta pardii subsp. nova (Tables 1-2, Figs. 1-2, 5-52).

Holotype: ♂ 15861 M.F., Rossana Brizzi and Riccardo Pirozzi leg., 1.VI.1972.

Paratypes: 15 ♂♂ n. 15855-15868 and 15878 M.F., 11 ♀♀ n. 15869-15877 and 15879-15880 M.F., same data as for the holotype. 13 ♂♂ n. 18691-18701 and 18720 M.F., 2 ♀♀ n. 18702-18703 M.F., Rossana Brizzi, Paolo Innocenti and Stefano Turillazzi leg., 30.IX.1972.

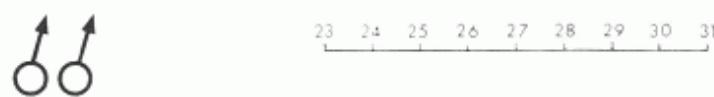
Derivatio nominis: We take pleasure in dedicating this new form to Prof. Leo Pardi, Director of the Istituto di Zoologia dell'Università di Firenze.

Diagnosis: A rather small (maximum body length: ♂ 57 mm, ♀ 54 mm) insular race of *Podarcis tiliguerta* which is always brown above and yellow beneath; the supraciliary stripe is discontinuous in 88.00% of the adult males and 18.10% of the females; the dorsal pattern striated in all the females and striated in 60%, intermediate in 24% and reticulated in 16% of the males; the intermediate and inner rows of ventral plates are unspotted.

Description of the holotype (Figs. 1-2, 3rd specimen from the left). Small, rather platycephalous. Head scutellation normal. Nasals in contact behind the rostral. 6/6 supraciliaries; 14/13 supraciliary granules in an uninterrupted series between 1st and 4th supraoculars; 1st supraciliary not in contact with the 2nd supraocular; occipital triangular, a little shorter and wider than the interparietal; 4 supralabials in front of the subocular; large *tympanicum* and *massetericum*, the latter separated from the supratemporals by a row of temporals; 4/4 supratemporals, the first of which very long; 27 gulars; 10 collar scales. 61 smooth midbody scales. Ventrals in 6 longitudinal and 25 transverse rows;

- Fig. 27. — Variation in the number of male ventral scales (see Fig. 5).
 Fig. 28. — Variation in the number of female ventral scales (see Fig. 5).
 Fig. 29. — Variation in the number of male collar scales (see Fig. 5).
 Fig. 30. — Variation in the number of female collar scales (see Fig. 5).

Fig. 27



Giraglia 27

23 24 25 26 27 28 29 30 31

Poraggia Grande 30

23 24 25 26 27 28 29 30 31

Poraggia Piccola 16

23 24 25 26 27 28 29 30 31

Toro Grande 30

23 24 25 26 27 28 29 30 31

Toro Piccolo 15

23 24 25 26 27 28 29 30 31

Vacca 10

23 24 25 26 27 28 29 30 31

Maestro Maria 13

23 24 25 26 27 28 29 30 31

Piana 8

23 24 25 26 27 28 29 30 31

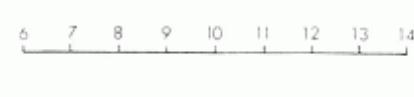
Pietricaggiosa 12

23 24 25 26 27 28 29 30 31

Cavallo 10

23 24 25 26 27 28 29 30 31

23 24 25 26 27 28 29 30 31



Giraglia 27

6 7 8 9 10 11 12 13 14

Poraggia Grande 30

6 7 8 9 10 11 12 13 14

Poraggia Piccola 16

6 7 8 9 10 11 12 13 14

Toro Grande 30

6 7 8 9 10 11 12 13 14

Toro Piccolo 15

6 7 8 9 10 11 12 13 14

Vacca 10

6 7 8 9 10 11 12 13 14

♀♀

Giraglia 13

24 25 26 27 28 29 30 31 32 33

6 7 8 9 10 11 12 13 14

Poraggia Grande 22

24 25 26 27 28 29 30 31 32 33

6 7 8 9 10 11 12 13 14

Poraggia Piccola 6

24 25 26 27 28 29 30 31 32 33

6 7 8 9 10 11 12 13 14

Toro Grande 19

24 25 26 27 28 29 30 31 32 33

6 7 8 9 10 11 12 13 14

Toro Piccolo 11

24 25 26 27 28 29 30 31 32 33

6 7 8 9 10 11 12 13 14

Vacca 6

24 25 26 27 28 29 30 31 32 33

6 7 8 9 10 11 12 13 14

Maestro Maria 12

24 25 26 27 28 29 30 31 32 33

6 7 8 9 10 11 12 13 14

Piana 7

24 25 26 27 28 29 30 31 32 33

6 7 8 9 10 11 12 13 14

Pietricaggiosa 8

24 25 26 27 28 29 30 31 32 33

6 7 8 9 10 11 12 13 14

Cavallo 4

24 25 26 27 28 29 30 31 32 33

6 7 8 9 10 11 12 13 14

24 25 26 27 28 29 30 31 32 33

6 7 8 9 10 11 12 13 14

Fig. 28

Fig. 30

22/23 femoral pores and 31/31 subdigital lamellae under the 4th toe.

Pileus brown with black spots; outer border of 4th supra-ocular and of the parietal green, dorsal and lateral parts of the trunk with a well-developed reticulation which becomes denser laterally; remains of the dorsal bands brown with a little green especially posteriorly; ground colour of the flanks reduced to numerous rounded yellowish-green spots mixed, in the axillary region, with 5/7 blue spots; tail dorsally and laterally spotted with black, green and brown; forelimbs dorsally black with numerous rounded bluish-green spots, hindlimbs dorsally brown and black with many rounded yellowish spots. Sides of the head black and brown with some bluish-green on supralabials and lower temporals. Ventral side of the head, throat and breast cadmium yellow with black spots and vermiculations; submaxillaries partially greenish; belly, ventral sides of hindlimbs and root of the tail yellow (similar to *S. n. 228*); ventral side of forelimbs slightly lighter than *S. n. 228*; tail changes distally from light yellow to grey; outer row of ventrals spotted black, blue and pea-green.

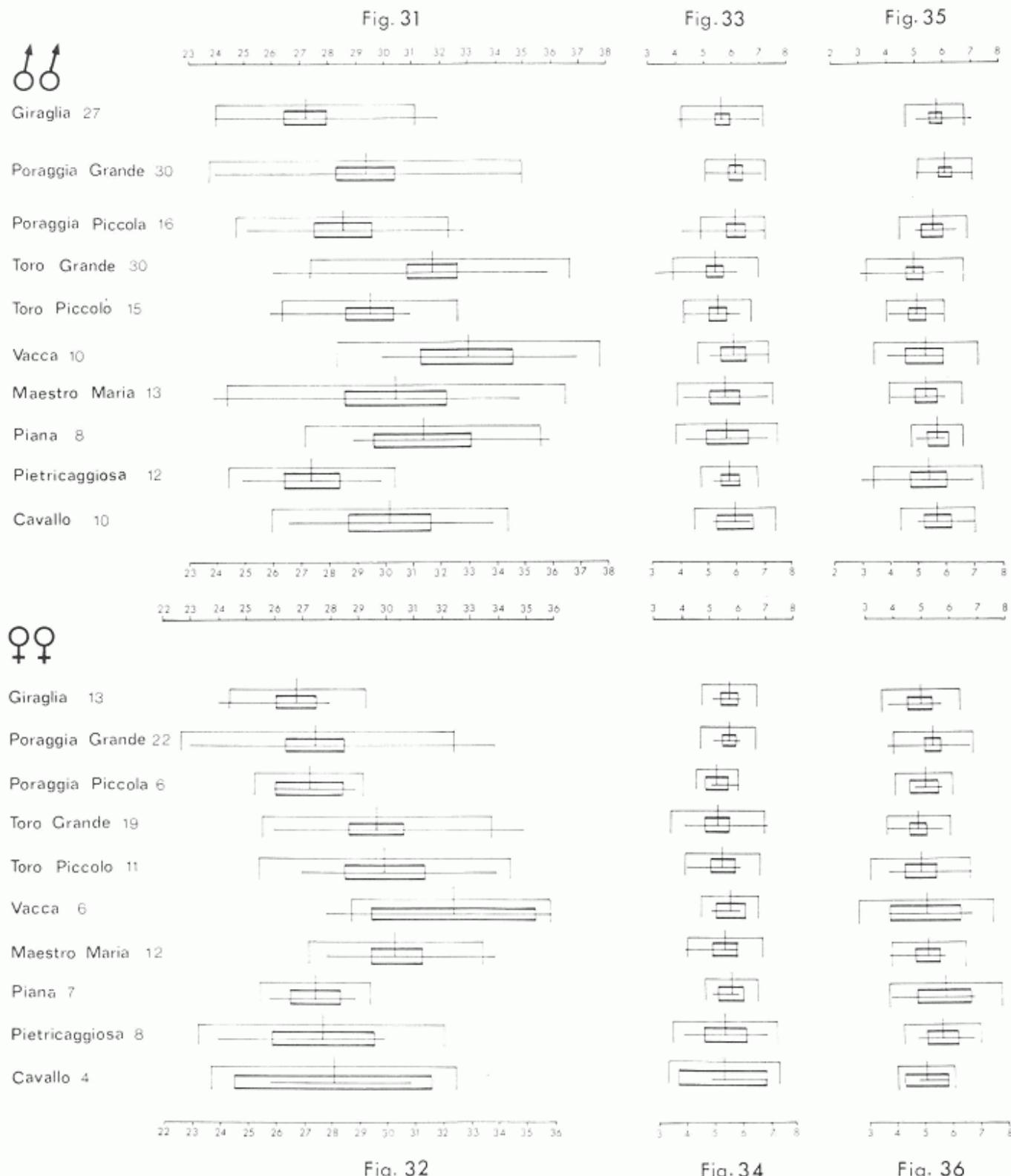
Measurements (in mm): from tip of snout to vent = 54; tail regenerated; pileus length = 12.9; width of head = 7.8; depth of head = 6.5; forelimb = 20.1; hindlimb = 31.5.

Description of the paratypes (Tables 1-2; Figs. 1-2, 5-52). In general their characters correspond rather well to those of the holotype, except for the usual sexual differences. For instance, the females have smaller axillary spots, fewer blue or bluish spots on the flanks and no or only a few blue and/or black spots on the outer rows of ventrals. See Tables 1-2, Figs. 1-2, 5-52 and sections A-B of Chapter II for the analytical data on their colour, pattern and morphology.

The *scutum massetericum* is always separated from the supratemporals by 1-2 rows of temporals, touching the supratemporals on both sides of only ♀ n. 15869 M.F. and the right side of only ♀ n. 15879 M.F.

The following head scutellation anomalies were found in the paratypes (*l* = left, *r* = right):

- 1) interparietal not touching the occipital because of the interposition of a small plate: ♂♂ 15862, 18699; ♀♀ 15872, 15880;



- Fig. 31. — Variation in the number of male gular scales (see Fig. 5).
 Fig. 32. — Variation in the number of female gular scales (see Fig. 5).
 Fig. 33. — Variation in the number of male left supraciliars (see Fig. 5).
 Fig. 34. — Variation in the number of female left supraciliars (see Fig. 5).
 Fig. 35. — Variation in the number of male right supraciliars (see Fig. 5).
 Fig. 36. — Variation in the number of female right supraciliars (see Fig. 5).

- 2) 5 supralabials in front of the subocular: ♂ 18694 (r); ♀ ♀ 15872 (l), 15874 (l);
- 3) interparietal and occipital fused together: ♂ ♂ 15857, 15860, 18696;
- 4) a small plate between parietal and occipital along the posterior border of the pileus: ♀ ♀ 15872 (l, r), 15879 (r);
- 5) a plate between frontonasal (†) and prefrontals: ♂ 15865;
- 6) a plate between the frontonasal, prefrontals and frontal: ♂ 18698, ♀ 15870;
- 7) anterior loreal divided in two parts: ♂ 15860 (l);
- 8) frontal divided in two parts: ♀ 15869;
- 9) 1st supraocular divided in two parts: ♀ 18703 (r);
- 10) postnasal divided in two parts: ♀ 15872 (l, r);
- 11) a small plate between anterior and posterior loreal: ♂ 15868 (l);
- 12) interparietal fragmented: ♂ 15856;
- 13) occipital fragmented: ♂ 15856;
- 14) 3rd supralabial partially divided in two parts: ♀ 15874 (r);
- 15) 2nd and 3rd supraoculars partially fused together: ♀ 15870 (r).

Measurements (in mm): 1 - from tip of snout to vent; 2 - tail length; 3 - pileus length; 4 - width of head; 5 - depth of head; 6 - length of forelimb; 7 - length of hindlimb.

	1	2	3	4	5	6	7
♂ 15878	44	98	10.4	6.2	4.9	16.6	27.4
♂ 15868	48	100	11.5	6.6	5.1	16.9	28.8
♂ 15855	56	reg.	13.6	7.5	5.8	18.9	33.6
♂ 15863	57	reg.	13.2	7.9	6.2	20.2	32.6
♀ 15880	39	69	8.9	4.8	3.7	13.8	22.2
♀ 15873	46	94	10.5	5.8	4.5	15.8	25.0
♀ 15871	50	reg.	10.8	5.9	4.3	16.0	26.1
♀ 15870	54	reg.	11.2	6.4	5.2	16.2	25.5

(†) In some previous works, Lanza referred to SCHREIBER's nomenclature for the head lepidosis in Lacertidae: internasal = frontonasal; loreal or frenal = anterior loreal; frenoocular = posterior or second loreal (SCHREIBER E. 1912. *Herpetologia europaea*. Jena; G. Fischer, pp. 331-332, Fig. 66).

Fig. 37

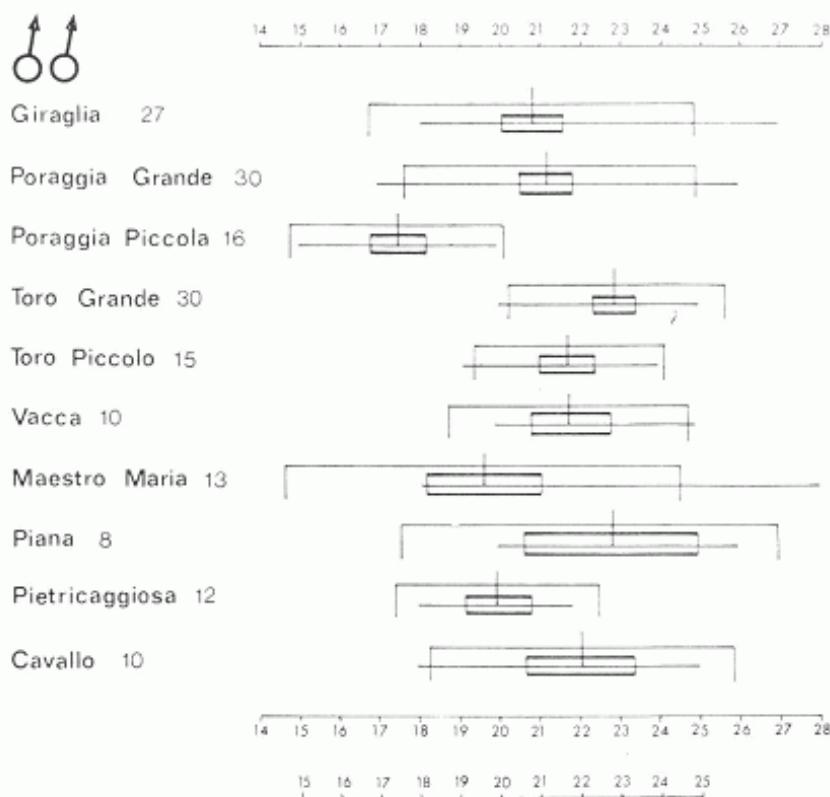


Fig. 39

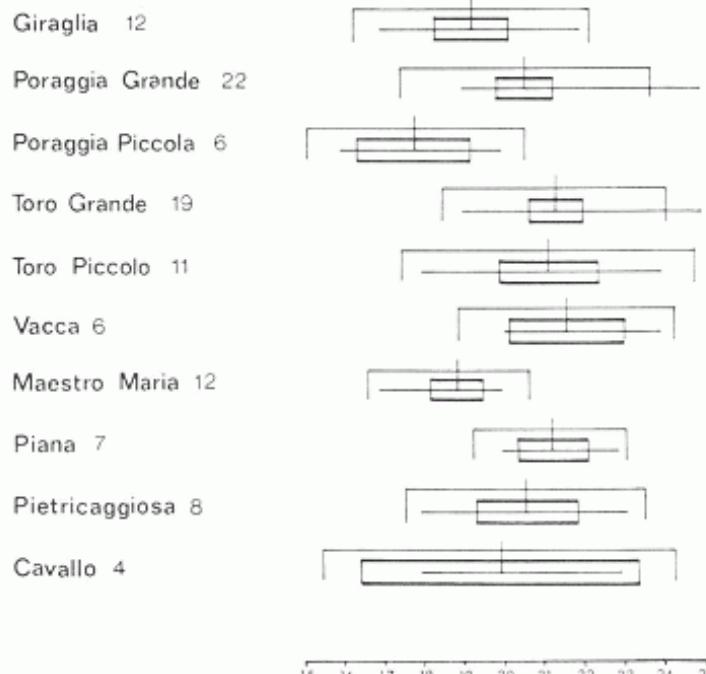
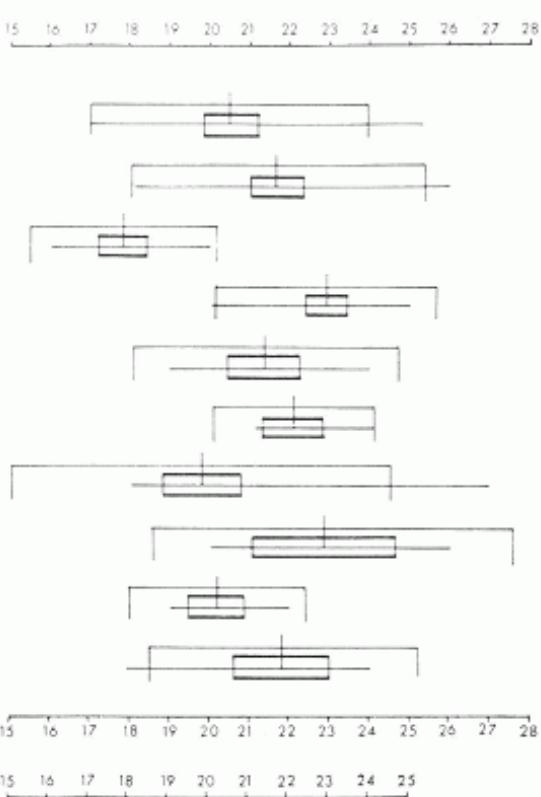


Fig. 38



Fig. 40

- Fig. 37. — Variation in the number of male left femoral pores (see Fig. 5).
 Fig. 38. — Variation in the number of female left femoral pores (see Fig. 5).
 Fig. 39. — Variation in the number of male right femoral pores (see Fig. 5).
 Fig. 40. — Variation in the number of female right femoral pores (see Fig. 5).

Affinities. - *Podarcis tiliguerta pardii* has the most affinity to *Podarcis tiliguerta eiselti* (Lanza) and *Podarcis tiliguerta gran-*
chii subsp. *nova*, differing from them in having a higher per-
centage of supraciliary stripe discontinuity [*pardii* ♂♂ 88%,
♀♀ 18.10%; *eiselti* ♂♂ 23.07% (Maestro Maria) - 25% (Piana,
Petricaggiosa), ♀♀ 0%; *granchii* ♂♂ 23.33% (Poraggia Gran-
de) - 37.05% (Poraggia Piccola), ♀♀ 0%] and more blue spots
on the flanks in both sexes (Figs. 9-10). It differs from *P. t. gran-*
chii in having males of smaller size (maximum head + body
length: *pardii* 57 mm, *granchii* 63 mm) and with a less spotted
throat; it differs from the Cavallo Island population (*Podarcis*
tiliguerta subsp. *inquirenda*) in having smaller males (maximum
head + body length: *pardii* 57 mm, Cavallo 62 mm), constantly
yellow-bellied females (*pardii* 100%, Cavallo 50%) and a higher
percentage of supraciliary stripe discontinuity (*pardii* ♂♂ 88%,
♀♀ 18.10%; Cavallo ♂♂ 40%, ♀♀ 0%).

P. t. pardii is easily distinguishable from *P. t. grandisonae*
in having a more or less well developed *scutum massetericum*
(lacking or very poorly developed in *grandisonae*), smaller males
(maximum head + body length: *pardii* 57 mm, *grandisonae* 63
mm), fewer femoral pores in the females, fewer supratemporals
in the males (Figs. 37, 39, 49, 51), fewer gular scales (Figs. 31-
32) and more collar scales (Figs. 29-30) in both sexes, throat
(Figs. 7-8) and intermediate rows of ventral scales less spotted
(Figs. 13-14), a higher percentage of supracillary stripe discon-
tinuity (*pardii* ♂♂ 88%, ♀♀ 18.10%; *grandisonae* ♂♂ 50%,
♀♀ 0%). In comparison to *P. t. maresi* it is smaller [maximum
head + body length: *pardii* ♂♂ 57 mm, ♀♀ 54 mm; *maresi*
♂♂ 73 mm (Toro Piccolo) - 69 mm (Toro Grande), ♀♀ 64 mm],
has fewer midbody (Figs. 25-26), ventral (Figs. 27-28), gular
(Figs. 31-32), subdigital (Figs. 41-44) and supratemporal scales
(Figs. 49-52), a lower percentage of supracillary stripe discon-
tinuity [*pardii* ♂♂ 88%, ♀♀ 18.10%; *maresi* ♂♂ 100%, ♀♀
63.60% (Toro Piccolo) - 73.06% (Toro Grande)], usually unretic-
ulated dorsal parts (Figs. 5-6), lighter ventral yellow (Figs. 17-
22) and less spotted throat (Figs. 7-8) and ventrals (Figs. 11-16).

In addition to other characters, all the other known popula-
tions of *P. tiliguerta* differ markedly from *P. t. pardii* in their
lack or almost complete lack of ventral yellow.

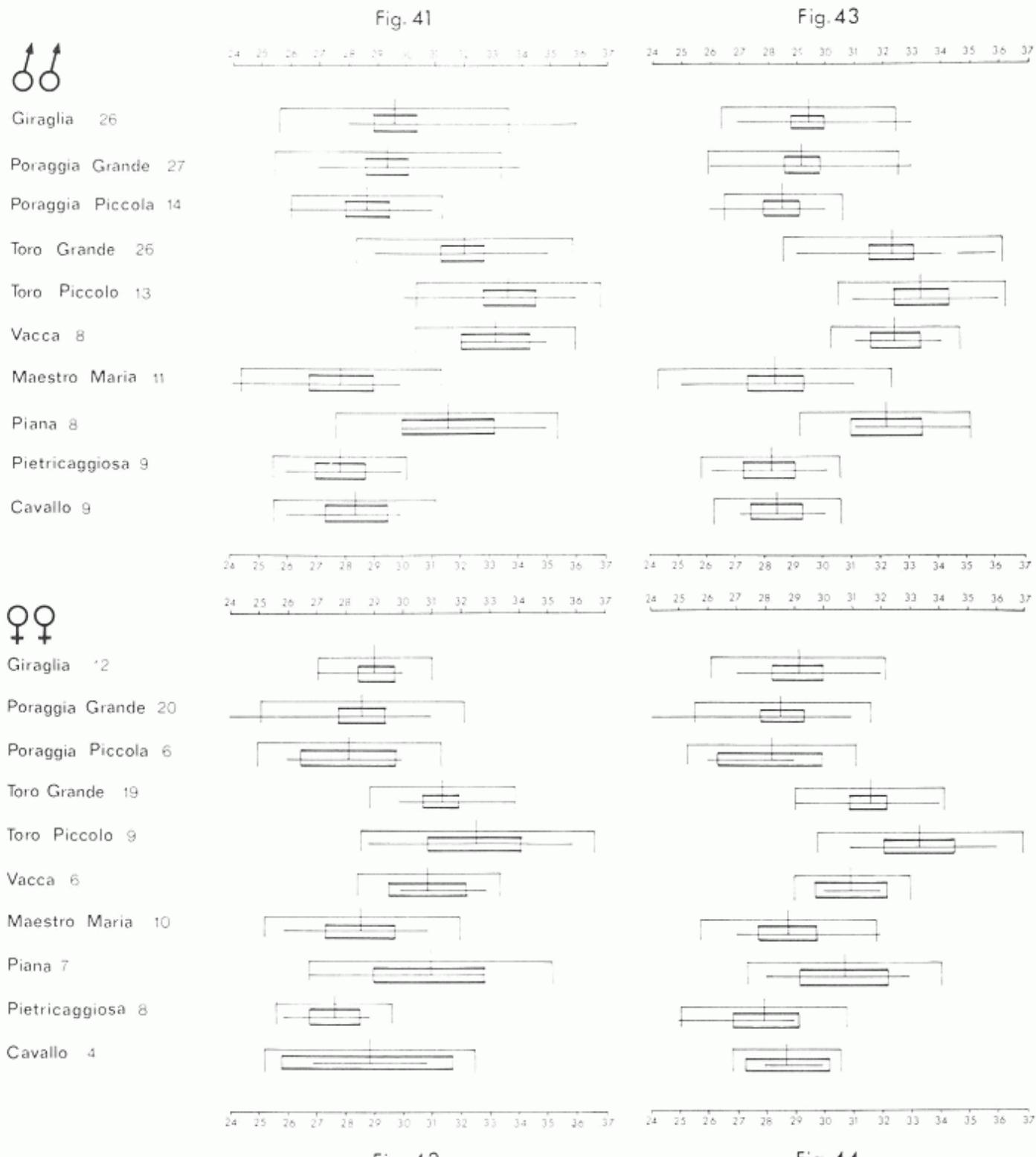


Fig. 41. — Variation in the number of male left subdigital lamellae (see Fig. 5).

Fig. 42. — Variation in the number of female left subdigital lamellae (see Fig. 5).

Fig. 43. — Variation in the number of male right subdigital lamellae (see Fig. 5).

Fig. 44. — Variation in the number of female right subdigital lamellae (see Fig. 5).

Geographical, botanical and zoological notes on Giraglia Island. This island, formed of « calcescisti » (schists, amphibolitic and pyroxenitic quartzites) and included in the 20 m depth contour, lies 1.5 km north of Capo Corso from which it is separated by a channel about 15 m deep. It is 64 m high, measures 700 × 300 m and has a surface of about 93, 950 m².

Notwithstanding its rather large size, it has only a low vegetation and none of the most characteristic trees or shrubs of the Mediterranean « macchia » (*Myrtus*, *Pistacia*, *Arbutus*, *Phillyrea*, *Olea*, *Juniperus*, *Cistus*, *Calycotome*, etc.). The following species were found during our two trips to the island (1.VI. 1972: R. Brizzi, P. Innocenti, S. Turillazzi; 30.IX.1972: R. Brizzi, R. Pirozzi):

Catapodium loliaceum (Huds.) Link (VI, IX), *Dactylis glomerata* L. (IX), *Lagurus ovatus* L. (IX), *Koeleria pubescens* P. B. (VI) (Poaceae); *Arisarum vulgare* Targ. (IX) (Araceae); *Allium commutatum* Gussone (IX) and *Allium ampeloprasum* L. (*sensu lato*) (VI) (Liliaceae); *Atriplex portulacoides* L. (VI, IX) (Chenopodiaceae); *Lotus creticus* L. (VI, IX) (Phaeoleolaceae); *Crithmum maritimum* L. (VI, IX) (Umbelliferae); *Lavatera arborea* L. (VI, IX) (Malvaceae); *Limonium × dolcheri* Pignatti (VI, IX) (Plumbaginaceae); *Orobanche* sp. (IX) (Orobanchaceae); *Carlina corymbosa* L. (IX), *Crepis bulbosa* Tausch. (IX) *Helichrysum microphyllum* Camb. (VI, IX) and *Senecio cineraria* DC (VI, IX) (Asteraceae). A few species are quoted by BRIQUET & LITARDIÈRE [1935, p. 127: *Lavatera arborea* L. (Malvaceae); 1955, p. 42: *Centaurium tenuiflorum* (Hoffmigg. et Link) Fritsch ap. Janchen (Gentianaceae)], LITARDIÈRE [1953, p. 129: *Catapodium loliaceum* (Huds.) Link (Poaceae); 1955, p. 31: *Hymenolobus procumbens* (L.) Nutt. ex Torre & A. Gray var. *revelieri* (Pamp.), quoted as *Capsella procumbens* (L.) Fries. var. *Revelieri* (Jord. et Fourr.) (Cruciferae); 1955, p. 32: *Sedum rubens* L. (Crassulaceae)] and CONRAD (undated, p. 34: *Allium multiflorum* D.C. non Desf. = *A. polyanthemum* Boreau).

The island is visited by the gull *Larus argentatus michaellis* Naumann and probably by other birds, but there wasn't time to conduct research on either these or mammals. In addition to *Podarcis tiliguerta pardii* Lanza & Brizzi, the reptiles includes the geckos *Tarentola mauritanica mauritanica* L. and *Phyllodactylus*

Fig. 45

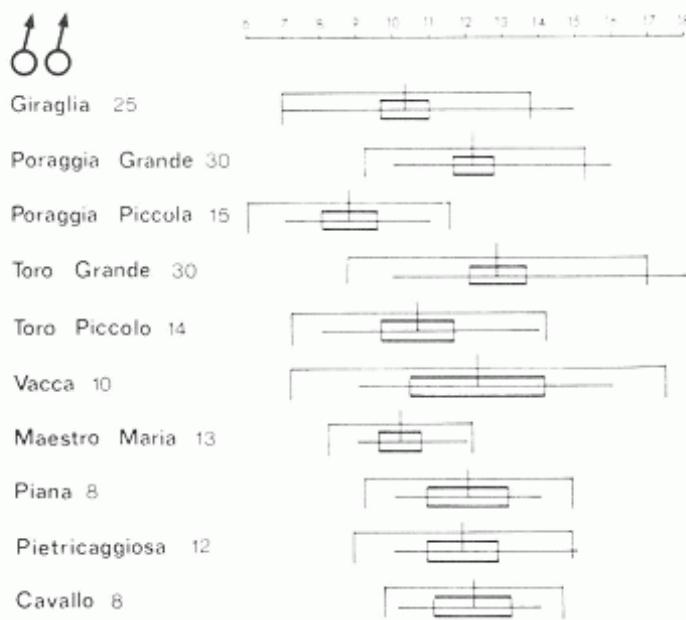


Fig. 47

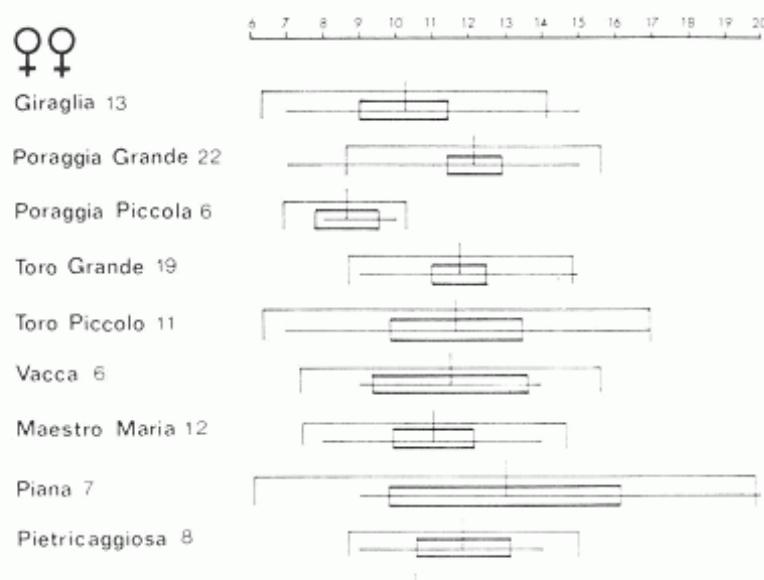
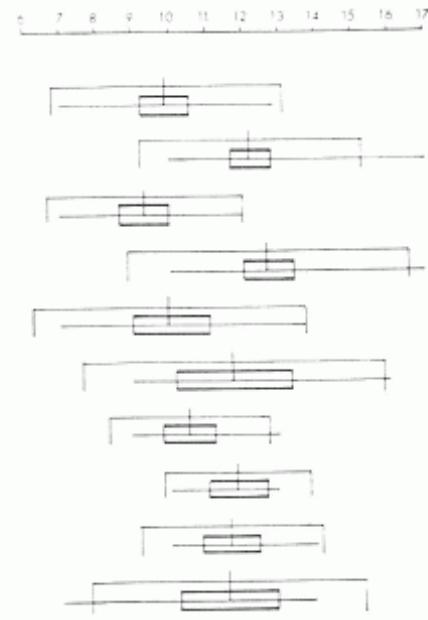


Fig. 46

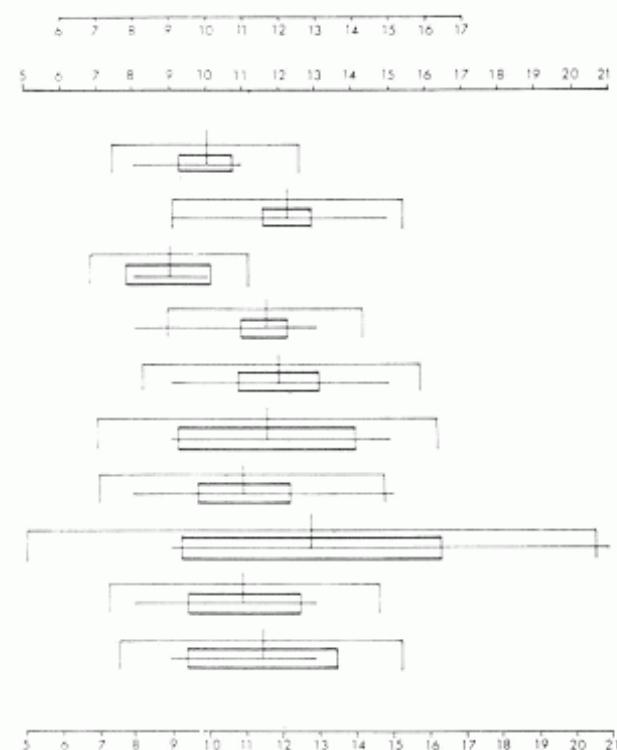


Fig. 48

Fig. 45. — Variation in the number of male left supraciliary granules (see Fig. 5).

Fig. 46. — Variation in the number of female left supraciliary granules (see Fig. 5).

Fig. 47. — Variation in the number of male right supraciliary granules (see Fig. 5).

Fig. 48. — Variation in the number of female right supraciliary granules (see Fig. 5).

europaeus Gené and the snake *Coluber viridiflavus* subsp. inquirenda. The invertebrates are represented by the snails *Marmorana* (*Marmorana*) *serpentina serpentina* (Férussac), *Cernuella* (*Cernuella*) sp. (of the *profuga* sensu lato group), *Helix aspersa* Müller and *Eobania vermiculata* (Müller) (Helicidae), by the Chilopoda *Stigmatogaster gracilis* Mein. (Geophilomorpha Himantariidae), *Dignathodon microcephalum* (Luc.), *Pachymerium ferrugineum* C. L. Koch (Geophilomorpha Geophilidae) and *Scutigera coleoptrata* (Scutigeromorpha Scutigeridae), by the scorpion *Euscorpius flavicaudis* (De Geer), by some woodlice (Crustacea Isopoda), Araneida und Diplopoda as well as by the following insects: *Mantis religiosa* L. (Mantoidea Mantidae); *Platycleis intermedia* (Serv.) (Orthoptera Tettigonidae); *Loboptera decipiens* (Germ.) (Blattoidea Blattidae); the bugs *Geotomus elongatus* (H. S.) (Sydnidae), *Lygaeus saxatilis* (Scop.) (Lygaeidae), *Odontoscelius fuliginosus* (L.) f. *litura* (F.) and f. *carbonaria* (F.) (Pentatomidae), *Pyrrhocoris apterus* (L.), *Scantius aegyptius* (L.) (Pyrrhocoridae); the beetles *Carabus (Macrothorax) morbillosus* morbillosus S. and *Harpalus tenebrosus* Dej. (Carabidae), *Blaps gigas* L. (Tenebrionidae), *Parmena solieri* Muls. and *Vesperus luridus* Rossi (Cerambycidae), *Staphylinus olens* Müll. (Staphylinidae).

IV. - The Poraggia Grande and Poraggia Piccola lizard.

Podarcis tiliguerta granchii subsp. nova (Tables 1-2, Figs. 3-52).

Holotype: ♂ n. 16291 M.F., Poraggia Piccola Islet; Benedetto and Marco Lanza, Ettore Granchi and Fabio Sammicheli leg., 6.VIII.1972.

Fig. 49. — Variation in the number of male left supratemporals (see Fig. 5).

Fig. 50. — Variation in the number of female left supratemporals (see Fig. 5).

Fig. 51. — Variation in the number of male right supratemporals (see Fig. 5).

Fig. 52. — Variation in the number of female right supratemporals (see Fig. 5).

Fig. 49



2 3 4 5 6 7 8 9 10 11

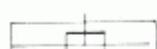
Giraglia 27



Poraggia Grande 29



Poraggia Piccola 16



Toro Grande 30



Toro Piccolo 15



Vacca 10



Maestro Maria 13



Piana 8



Pietricaggiosa 12



Cavallo 10

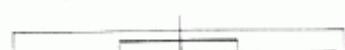
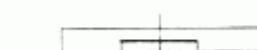
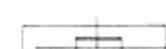
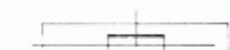
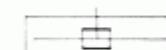


Fig. 51

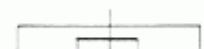
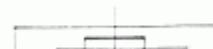
3 4 5 6 7 8 9



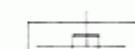
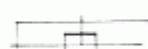
2 3 4 5 6 7 8 9 10 11

3 4 5 6 7 8 9

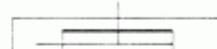
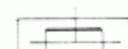
Giraglia 13



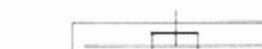
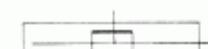
Poraggia Grande 22



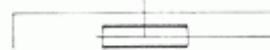
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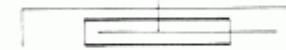
Toro Grande 19



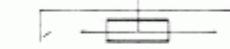
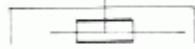
Toro Piccolo 11



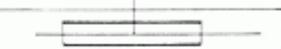
Vacca 6



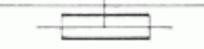
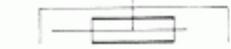
Maestro Maria 12



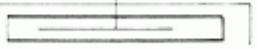
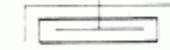
Piana 7



Pietricaggiosa 8



Cavallo 4



3 4 5 6 7 8 9 10 11

2 3 4 5 6 7 8 9 10

Fig. 50

Fig. 52

Paratypes: 74 specimens from Poraggia Grande Islet (25 ♂♂ n. 16247-16271 M.F., 19 ♀♀ n. 16272-16290 M.F., Maria Luisa Azzaroli, Marta and Andrea Bucciarelli, Rossana Brizzi leg., 6.VIII.1972; 5 ♂♂ n. 18940-18944 M.F., 3 ♀♀ n. 18945-18947 M.F., Marco Lanza and Riccardo Simoni leg., 28.VII.1973), Poraggia Piccola Islet (14 ♂♂ n. 16291-16304 M.F., 5 ♀♀ n. 16305-16309 M.F., same data as for the holotype; 2 ♂♂ n. 18948-18949 M.F., 1 ♀ n. 18950 M.F., Marco Lanza and Rodolfo Simoni leg., 28.VII.1973).

Derivatio nominis: We take pleasure in dedicating this new form to Mr. Ettore Granchi, technician of the Istituto di Zoologia dell'Università di Firenze and one of the best Italian taxidermists and field naturalists, to whom the Museo Zoologico « La Specola » is indebted for some of its finest material.

Diagnosis: A rather small or medium-sized (maximum body length: ♂ 63 mm, ♀ 60 mm), insular race of *Podarcis tiliguerta* which is always brown above and yellow beneath; the supraciliary stripe is continuous in all the females and in more than 60% of the adult males; the dorsal pattern is striated in nearly all the females and striated (25% Poraggia Piccola, 33.40% P. Grande), intermediate (26.60% P. Grande, 37.50% P. Piccola) or reticulated (37.50 P. Piccola, 40% P. Grande) in the adult males; the intermediate and inner rows of ventral plates are unspotted.

Description of the holotype (Figs. 3-4, first specimen from the left). Medium-sized, rather platycephalous. Normal head scutellation. Nasals in contact behind the rostral. 6/6 supraciliaries; 9 + 1/9 supraciliary granules; 1st supraciliary in contact with the 2nd supraocular; occipital subtriangular, a little shorter and wider than the interparietal; 4 supralabials in front of the subocular; large *tympanicum* and very large *massetericum*, the latter separated from the supratemporals by a row of temporals; 6/6 supratemporals; 31 gulars; 10 collar scales. 65 smooth midbody scales. Ventrals in 6 longitudinal and 26 transverse rows. 17/17 femoral pores; 4th toe mutilated on both sides.

Pileus light brown, but greenish on the snout, with black and blackish spots. Dorsal parts of the body brown with a poorly developed black reticulation; supraciliary stripe subcontinuous, hazel-grey on the neck, light yellowish-green behind; tail regenerated, its basal unregenerated portion greenish-brown with

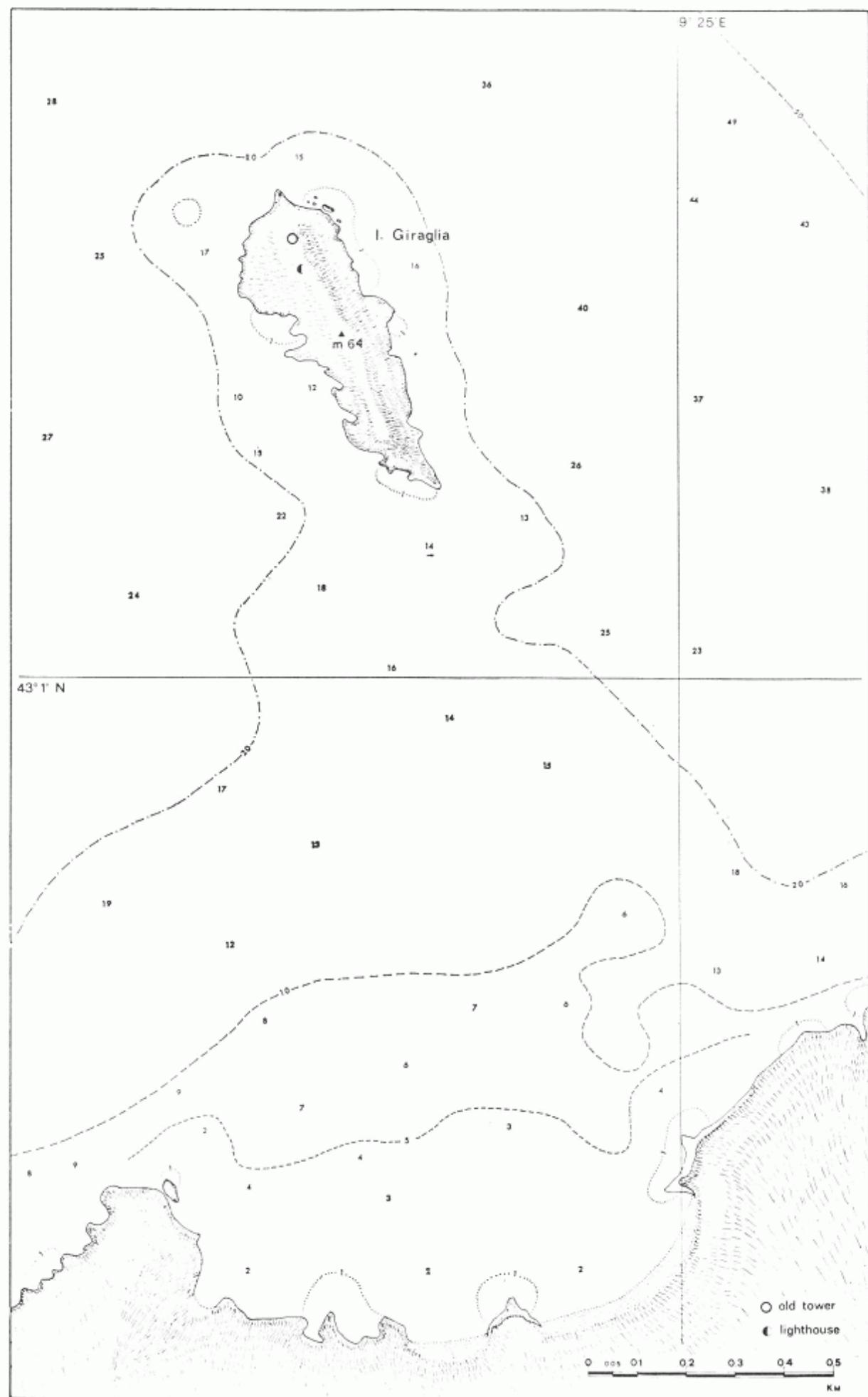


Fig. 53. — Map of the Giraglia Island.

black spots. Sides of the head brown and black with pea-green supralabials and lower temporals; sides of the neck hazel-grey and black; flanks with black and brown reticulation and rounded greenish spots. Blue axillary spot lacking on the left side, well-developed on the right; two blue spots behind the axilla on both sides. Ventral parts yellow (similar to *S.* n. 271 = jaune d'or) except for the regenerated portion of the tail; submaxillar scales and throat with blackish spots; outer ventral rows with dark brown and ultramarine blue spots. Forelimbs black and brown dorsally, greenish-yellow anteriorly and light yellow ventrally; hindlimbs olive-brown with some small rounded greenish spots dorsally, greenish-yellow with blackish spots anteriorly and yellow (*S.* n. 271) ventrally.

Measurements (in mm): from tip of snout to vent = 62; tail regenerated; pileus length = 15.3; width of head = 10; depth of head = 7.5; forelimb 21; hindlimb broken.

Description of the paratypes (Tables 1-2, Figs. 3-52). The same applies for them as for the *P. t. pardii* paratypes. See Tables 1-2, Figs. 3-52 and sections A-B of Chapter II for the analytic data on their colour, pattern and morphology.

The *scutum massetericum* is always well-developed and sometimes very large. It touches the supratemporals on both sides in 25% (Poraggia Piccola) - 46.66% (P. Grande) of the males and in 33.33% (P. Piccola) - 40.90% (P. Grande) of the females; otherwise it is separated by one row of temporals.

The following head scutellation anomalies were found in the paratypes (*l* = left, *r* = right):

- 1) interparietal not touching the occipital because of the interposition of a plate: P. Piccola ♂ 16301; P. Grande ♂♂ 16247, 16250, 16254, 16263, 16269, 18941, ♀♀ 16279, 16282, 16287, 16289, 18946;
- 2) postnasal divided in two parts: P. Piccola ♀ 16305 (*l*); P. Grande ♂♂ 16258 (*l, r*), 16259 (*l*), 16269 (*r*), ♀♀ 16274 (*l, r*), 16284 (*l, r*), 16285 (*l*);
- 3) frontonasal in contact with the frontal: P. Piccola ♂♂ 16292, 16298, ♀ 16308; P. Grande ♂♂ 16256, 16269;
- 4) a plate between the postnasal, anterior loreal, prefrontal and frontonasal scales: P. Piccola ♂ 16295 (*l*); P. Grande ♂ 16253 (*r*), ♀ 16274 (*l*);

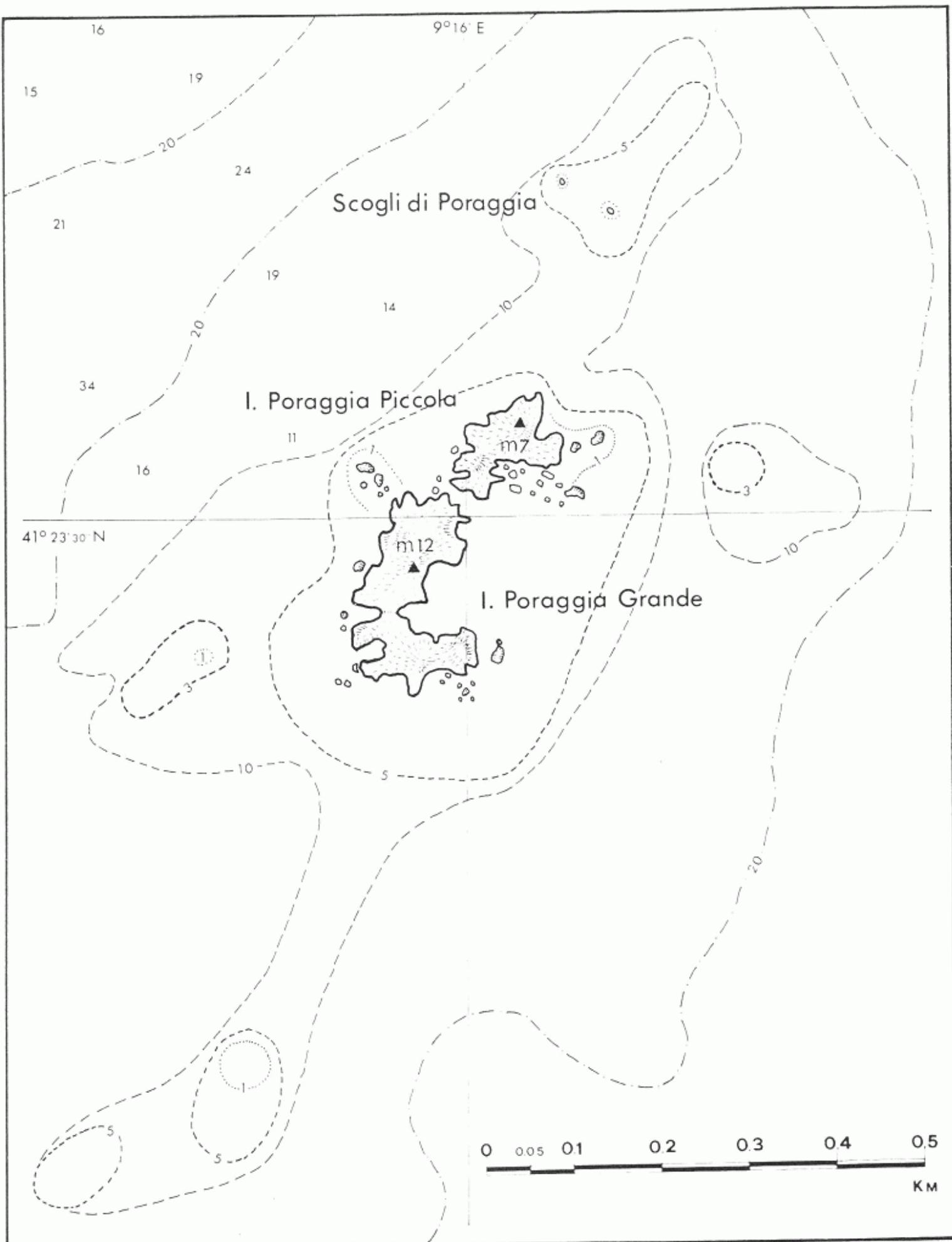


Fig. 54. — Map of the Poraggia Islets.

- 5) one or two small plates between the posterior loreal and the 3rd and 4th supralabials; P. Grande ♀ 16276 (1 plate, *r*), ♀ 16280 (2 plates, *r*);
- 6) five supralabials in front of the subocular: P. Grande ♀ ♀ 16280 (*r*), 18947 (*l*);
- 7) postnasal partially divided in two parts: P. Grande ♂ ♂ 16249 (*r*), 16259 (*r*);
- 8) occipital fragmented: P. Grande ♂ ♂ 16250, 16254;
- 9) interparietal fused with the occipital: P. Grande ♂ ♂ 16261, 18942;
- 10) second supraocular fragmented: P. Grande ♂ ♂ 16252 (*l*), 16259 (*r*);
- 11) interparietal divided in two parts, the posterior one partially fused with the occipital: P. Piccola ♂ 16294;
- 12) a small plate between parietal and occipital along the posterior border of the pileus: P. Piccola ♂ 16294 (*r*);
- 13) occipital region fragmented: P. Grande ♂ 16259;
- 14) anterior loreal partially divided in two parts: P. Grande ♂ 16248 (*r*);
- 15) frontal fragmented: P. Grande ♂ 16264;
- 16) posterior loreal divided in two parts: P. Grande ♀ 16274 (*r*);
- 17) supranasal divided in two parts: P. Grande ♀ 16277 (*r*);
- 18) a plate in the middle of the internasal and prefrontals: P. Grande ♂ 16271;
- 19) a plate between the frontonasal, prefrontals and frontal: P. Grande ♂ 16276;
- 20) third supraocular fragmented: P. Grande ♂ 16259 (*l*);
- 21) first supraocular divided in two parts: P. Grande ♀ 16274 (*l*);
- 22) frontonasal divided in two parts: P. Grande ♂ 16256;
- 23) posterior loreal fragmented: P. Grande ♂ 16253;
- 24) interparietal not touching the occipital because of the interposition of the parietals: P. Grande ♂ 16253;
- 25) parietal divided in two parts: P. Piccola ♂ 16298 (*l*);
- 26) a small plate deriving from a frontoparietal between the frontoparietals and interparietal: P. Piccola ♂ 16298 (*r*);
- 27) a small plate (deriving from the frontal) between the frontoparietal, second and third supraocular of one side and the frontal: P. Piccola ♂ 16298 (*r*);

- 28) *scutum massetericum* fragmented: P. Grande ♂ 16249 (*l*);
 29) very large *scutum tympanicum* divided in two parts: P. Grande ♂ 16248 (*l, r*);
 30) occipital partially fused with a parietal: P. Grande ♂ 16253 (*l*);
 31) temporal region irregularly scaled: P. Grande ♂ 16264 (*l, r*).

Measurements (in mm): 1 - from tip of snout to vent; 2 - tail length; 3 - pileus length; 4 - width of head; 5 - depth of head; 6 - length of forelimb; 7 - length of hindlimb.

	1	2	3	4	5	6	7
Poraggia Piccola							
♂ 16304	52	reg.	13.0	7.5	5.6	19.0	32.5
♂ 16294	63	reg.	15.1	10.0	7.1	20.5	32.5
♀ 16309	50	reg.	11.1	6.7	5.2	14.6	25.4
♀ 16305	55	reg.	12.3	8.0	5.6	17.7	28.0
Poraggia Grande							
♂ 16269	56	110	13.3	7.8	6.7	16.0	30.8
♂ 16251	62	reg.	14.9	9.5	7.4	16.2	31.9
♀ 16286	47	reg.	10.8	6.9	5.1	14.5	24.9
♀ 16274	57	reg.	11.7	7.2	5.8	16.6	25.5

Among the differences between the two populations, it should be noted that both sexes of Poraggia Piccola lizards have a significantly higher number of collar scales and lower number of femoral pores; moreover, they have a normal interparietal and occipital while these plates are often separated by a scale in the Poraggia Grande animals.

Affinities. - For the differences between *P. t. granchii* and *P. t. pardii* see page 23.

Podarcis tiliguerta granchii differs from *P. t. eiselti* in having males which are more often reticulated dorsally [striated: *granchii* 25% (Poraggia Piccola) - 33.40% (Poraggia Grande), *eiselti* 91.60% (Petricaggiosa) - 92.30% (Maestro Maria) - 100% (Piana); intermediate: *granchii* 13.60% (Poraggia Grande) - 37.50% (Poraggia Piccola), *eiselti* 0%; reticulated: *granchii*

37.50% (Poraggia Piccola) - 40% (Poraggia Grande), *eiselti* 0% (Piana) - 7.60% (Maestro Maria) - 8.30% (Pietricaggiosa)] and more yellow ventrally (Table 1, Figs. 17-22). It differs from *P. t. grandisonae* in having males which are more often reticulated (*grandisonae*: reticulated 0%, intermediate 20%, striated 80%) (Fig. 5), less spotted on the throat and intermediate ventral rows (Figs. 7, 13) and with a lower number of supratemporals (Figs. 49, 51) and lower percentage of supraciliary stripe discontinuity [*granchii* 23.33% (Poraggia Grande) - 37.05% (Poraggia Piccola), *grandisonae* 50%] and in having both sexes with a well-developed *scutum masstericum* (sometimes extremely small and usually lacking in *grandisonae*) and a lower number of gular scales (Figs. 31-32) and subdigital lamellae (Figs. 41-44). It differs above all from *P. t. maresi* in having a less developed dorsal reticulation (nearly always present in *maresi* (Figs. 5-6), gular (Figs. 7-8) and abdominal dark marking (Figs. 11-16), fewer lateral blue spots (Figs. 9-10) and subdigital lamellae (Figs. 41-44) and a lower percentage of supraciliar stripe discontinuity (Table 2). It only differs from the poorly known and geographically very near Cavallo lizard in having a little less developed ventral yellow; further studies might show that the Cavallo population pertains to *Podarcis tiliguerta granchii*.

Geographical, botanical and zoological notes on Poraggia Piccola and Poraggia Grande islets. - The rocky Poraggia Piccola and Poraggia Grande islets, formed of granite biotite (Hercynian Palaeozoic granite) and included (with Cavallo) in the 20 m depth contour, lie about 1750 m from the nearest point of the Corsican coast. They are separated from each other by a channel about 10 m wide and less than 2 m deep and from Cavallo by a channel 2 km wide, the greatest depth of which is about 15-16 m along its shallowest course.

Poraggia Piccola and Poraggia Grande islets are about 7 and 12 m high, 140 and 240 m long, 60 and 80 m wide and have a surface of 6,900 and 16,600 m², respectively.

On 6.VIII.1972, M. L. Azzaroli Puccetti, M. Bucciarelli Poggesi, R. Brizzi and B. Lanza collected the following plants: *Allium commutatum* Gussone [very common on Poraggia Piccola and perhaps absent on Poraggia Grande. The name « Poraggia » derives from this species, closely related to the leek, *Allium am-*

peloprasum L. var. *porrum* (L.) Fiori] (Liliaceae); the Chenopodiaceae *Atriplex portulacoides* L. (dominant on Poraggia Piccola), *Atriplex hastata* (L.) and *Beta maritima* L. (the latter collected only on Poraggia Grande); *Lotus creticus* L. (Phasellaceae), collected only on Poraggia Grande; *Spergularia rubra* Presl. (Caryophyllaceae), collected only on Poraggia Piccola; *Lavatera arborea* L. (Malvaceae), dominant on Poraggia Grande.

Columba livia Gmelin (Columbidae), *Apus pallidus brehmorum* Hartert (Apodidae) and perhaps *Phalacrocorax aristotelis desmarestii* (Payraudeau) (Phalacrocoracidae) nest at least on Poraggia Piccola. Both islets are inhabited by the gecko *Phyllodactylus europeaeus* Gené, the beetles *Akis bakarozzo* Schrank var. *tuberculata* Kraatz, *Blaps gibba* Laporte (Tenebrionidae) and *Parmena solieri* Muls. (Cerambycidae) and the bug *Scantius aegyptius* (L.) (Pyrrhocoridae). *Dermestes lanarius* Ill. (Coleoptera Dermestidae), *Porcellio spatulatus* Costa (Crustacea Isopoda), *Cernuella* sp., *Cochlodina knesteri* (Rossmässler) and *Eobania vermiculata* (Müller) (Mollusca Gastropoda) and remnants of the Carabidae *Calosoma sycophanta* L. were found only on Poraggia Piccola. The Tenebrionidae beetle *Probaticus (Pelorinus) ebeninus* Villa was found only on Poraggia Grande.

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